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ABSTRACT

The report presents information on the costs and operations of Gallaudet College, the Model Secondary School for the Deaf, Kendall Demonstration Elementary School, and the National Technical Institute for the Deaf (NTID). Among findings were that the four institutions serve students having a high degree of deafness. Compared with similar types of schools serving hearing students, Gallaudet and NTID costs per student in school year 1981-82 were considerably higher and student-faculty ratios considerably lower; comparable costs of the secondary school were similar to those of state residential schools for the deaf; the secondary school's enrollment was nearly 100 students below capacity in 1984 while NTID exceeded its capacity by 69 students and had a waiting list of 37 qualified applicants; and in 1983-84, 23% of NTID graduates received their degrees from Rochester, New York, colleges for hearing students. (CL)

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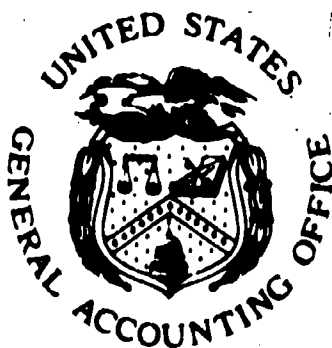
BY THE U.S. GENERAL ACCOUNTING OFFICE

**Report To The Chairman
Subcommittee On The Handicapped
Committee On Labor And Human Resources
United States Senate**

**Educating Students At Gallaudet And
The National Technical Institute
For The Deaf: Who Are Served
And What Are The Costs?**

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

HUMAN RESOURCES
DIVISION

B-216939

The Honorable Lowell Weicker, Jr.
Chairman, Subcommittee on the Handicapped
Committee on Labor and Human Resources
United States Senate

Dear Mr. Chairman:

In response to your April 19, 1984, request, this report presents information on the costs and operations of Gallaudet College, the Model Secondary School for the Deaf, Kendall Demonstration Elementary School, and the National Technical Institute for the Deaf. As agreed with your office, we plan no further distribution of the report until 30 days after issuance unless the report's contents are publicly announced earlier.

Sincerely yours,

A handwritten signature in cursive script that reads "Richard L. Fogel".

Richard L. Fogel
Director

**EDUCATING STUDENTS AT GALLAUDET AND THE
NATIONAL TECHNICAL INSTITUTE FOR THE DEAF:
WHO ARE SERVED AND WHAT ARE THE COSTS?**

Gallaudet College and the National Technical Institute for the Deaf (Technical Institute) are federally funded postsecondary institutions serving the deaf. Gallaudet College also operates the Model Secondary School for the Deaf (Secondary School) and Kendall Demonstration Elementary School (Elementary School). In fiscal year 1984, Gallaudet received \$56 million in federal funds for the College and its two schools, and the Technical Institute received \$28 million.

At the request of the Chairman of the Subcommittee on the Handicapped, Senate Committee on Labor and Human Resources, GAO identified

- the numbers and characteristics of the students served at the four schools,
- the comparative costs of educating deaf and "hearing" students, and
- the number of Technical Institute students who attend classes or obtain degrees from the other colleges of its parent institution, the Rochester Institute of Technology (Rochester).

BACKGROUND

Gallaudet College, the only 4-year liberal arts college for the deaf in the world, is a private, nonprofit institution in Washington, D.C., which was incorporated by the Congress in 1857. In fiscal year 1984, it received \$37.1 million in federal funds (about 75 percent of the College's total revenue) and had a fall 1984 enrollment of 2,000 students.

The Secondary School, a residential school which had 353 students in the fall of 1984, received \$12.2 million to serve primarily 14- to 20-year-old deaf students in Washington, D.C., and 5 neighboring states. The Elementary School, a day school which had 190 students in the fall of 1984, received \$6.7 million to serve deaf students from infancy to age 15 in the Washington, D.C., area. The Secondary School began full-scale operations in 1971; the Elementary School, in 1972.

RESULTS IN BRIEF

The Technical Institute, one of Rochester's nine colleges, is primarily a 2-year post-secondary institution which began operations in 1968 to prepare deaf students for successful employment. In the fall of 1984, it had 1,378 students.

GAO found that the four institutions serve students having a high degree of deafness. However, from 1981 to 1984, Gallaudet College had a considerable number of unoccupied beds in its dormitories. In the fall of 1984, the Secondary School was below its student enrollment capacity, whereas the Technical Institute exceeded its designated capacity.

GAO found that compared with similar types of schools serving "hearing" students, Gallaudet College's and the Technical Institute's

- costs per student in school year 1981-82 (\$23,772 and \$19,771, respectively) were considerably higher;

- student-faculty ratios in school year 1981-82 were considerably lower; and

- average annual faculty compensation (salaries and fringe benefits) in school year 1983-84 was lower.

The Secondary School's total cost per student in school year 1981-82 was \$25,567. Excluding its unique research and demonstration costs, its cost per student of \$15,085 was similar to those of state residential schools for the deaf. Data on day schools for the deaf were not available to compare the Elementary School's 1981-82 cost per student of \$31,327. GAO made no judgment as to the reasonableness of the four schools' costs.

In school year 1983-84, 45 of the 199 (23 percent) Technical Institute graduates received their degrees from other Rochester colleges for "hearing" students.

GAO'S ANALYSIS

Students Served

In recent entering classes at Gallaudet College and its two schools, 82 percent or more of the students had a hearing loss of at least 70 decibels, which is considered "severe"; 60 percent or more had an even

greater loss of at least 90 decibels. Entering Technical Institute students had an average hearing loss of 92 decibels. (A non-hearing impaired person hears at 0 decibels.) (See pp. 2, 19, 51, 65, and 87.)

While Gallaudet College has not established a student enrollment capacity, from 1981 to 1984, Gallaudet had unoccupied beds in its dormitories, ranging from 174 (13 percent) in the fall of 1983 to 300 (22 percent) in the spring of 1984. College officials stated that recruitment efforts need to be improved to increase the pool of qualified applicants. Because of a lack of qualified applicants from its primary service area, the Secondary School's enrollment in fall 1984 was almost 100 students below its capacity of 450. In the fall of 1984, the Technical Institute exceeded its designated deaf student capacity of 1,250 by 69 students and established a waiting list of 37 additional qualified applicants. (See pp. 16 to 17, 62, and 83 to 84.)

Cost Comparisons

Gallaudet College's and the Technical Institute's costs per student in 1981-82 ranged from 2 to 6 times higher than those of similar types of schools for the "hearing." Baseline data were not available on the costs of educating deaf postsecondary students.

As a major factor contributing to cost per student, Gallaudet College's student-faculty ratio of 7:1 for 1981-82 ranged from 2 to 3 times lower than those of similar types of "hearing" schools; the Technical Institute's ratio of 8:1 for 1981-82 and 9:1 for 1982-83 was almost 2.5 to 4 times lower. The Secondary School's ratio of 5:1 in 1982-83 was the same as the median ratio for state residential schools for the deaf. (See pp. 33 to 34, 41, 72, 100 to 101, and 105 to 106.)

Faculty compensation (salary and fringe benefits) also affects total cost per student. Compared to similar types of schools for the "hearing," in 1983-84

--Gallaudet's average annual faculty compensation of \$32,400 was \$100 to \$600 lower and

--The Technical Institute's average annual faculty compensation of \$30,900 was lower by \$1,500 to \$6,100.

The Secondary School's 1982-83 median faculty salary for teachers with master's degrees of \$19,500 was 8 percent higher than the median salary for state residential schools for the deaf. (See pp. 41 to 42, 73, and 106 to 107.)

**Cross-
Registration at
Rochester**

To resolve concern expressed in a 1971 audit report by the then Department of Health, Education, and Welfare that there was an over-emphasis by the Technical Institute on enrolling its students in other Rochester degree programs, the Department's Office of General Counsel determined that the Technical Institute may provide its students with opportunities to obtain bachelor's degrees.

Between 1970 and 1984, 398 Technical Institute graduates (21 percent of the 1,866 total Technical Institute graduates) received degrees from programs in other Rochester colleges. In 1984, Rochester charged the Technical Institute \$1.1 million for 10,930 credit hours taken by Technical Institute students attending classes in its other colleges. (See pp. 78 to 81.)

RECOMMENDATIONS

This report presents descriptive information. GAO is making no recommendations.

AGENCY COMMENTS

We discussed this report with Gallaudet and Technical Institute officials and made changes where appropriate.

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ABBREVIATIONS

AAUP	American Association of University Professors
ACT	American College Test
B.A.	Bachelor of Arts
B.S.	Bachelor of Science
CUPA	College and University Personnel Association
db	decibels
ED	Department of Education
GAO	General Accounting Office
HCI	high cost institutions
HEW	Department of Health, Education, and Welfare
HEGIS	Higher Education General Information Survey
IEP	Individualized Education Program
KDES	Kendall Demonstration Elementary School
MSA	Middle States Association
MSSD	Model Secondary School for the Deaf
NCHEMS	National Center on Higher Education Management Systems
NTID	National Technical Institute for the Deaf
PSA	Primary Service Area
RIT	Rochester Institute of Technology
SAT	Scholastic Aptitude Test
SAT-HI	Scholastic Aptitude Test for the Hearing Impaired

CHAPTER 1

INTRODUCTION

Gallaudet College and the Rochester Institute of Technology's (RIT's) National Technical Institute for the Deaf (NTID) are federally funded postsecondary institutions for the deaf. Gallaudet College also operates two other schools for the deaf--the Model Secondary School for the Deaf (MSSD) and Kendall Demonstration Elementary School (KDES). The Department of Education (ED) has administrative oversight responsibility for Gallaudet's and NTID's budgets.

Gallaudet College is the only 4-year liberal arts college for the deaf in the world. Originally called the Columbia Institution for the Instruction of the Deaf and Dumb and the Blind, it was incorporated in the District of Columbia by the Congress in 1857. In 1966 and 1970, respectively, the Congress expanded Gallaudet's mission to include the operation of MSSD and KDES as demonstration schools. Gallaudet receives an annual lump-sum federal appropriation for the college, MSSD, and KDES. In fiscal year 1984, Gallaudet received \$56 million and allotted \$37.1 million to the college, \$12.2 million to MSSD, and \$6.7 million to KDES. In the fall of 1984, Gallaudet College had 2,000 students, including 318 graduate students, 1,462 undergraduates, and 220 nondegree students; MSSD had 353 students; and KDES had 190 students.

Gallaudet College offers associate's, bachelor's, master's, and doctor's degrees. Entering students are admitted into either Gallaudet's (1) regular freshman program or (2) 1-year preparatory program which provides remedial instruction to entering students who are not academically ready for college instruction. Students who successfully complete the preparatory program may then continue in Gallaudet's regular program.

Gallaudet occupies two campuses in Washington, D.C. The northeast campus houses the regular undergraduate program, graduate program, MSSD, and KDES. The northwest campus houses the college's preparatory program, including dormitories, athletic facilities, classrooms, an auditorium, a library, and a cafeteria.

In response to the high unemployment rate among the deaf, in 1965 the Congress authorized the establishment of NTID. As a technical institution which primarily awards associate's degrees, NTID provides an alternative to the traditional liberal arts education offered at Gallaudet. In 1966, RIT, a private 4-year postsecondary institution in Rochester, New York, was competitively awarded a contract to operate NTID. As the sponsoring institution, RIT is reimbursed by the federal government

for NTID expenses. In fiscal year 1984, RIT received federal funds of \$28 million to operate NTID.

NTID offers associate's degrees, diplomas, and certificates. In addition, NTID students may enroll in classes or transfer into associate's, bachelor's, and master's degree programs at RIT. In the fall of 1984, NTID had an enrollment of 1,378 students, including 1,111 enrolled in NTID programs, 208 enrolled in degree programs in other RIT colleges, and 59 hearing students enrolled in NTID's associate's degree program in interpreting for the hearing impaired.

As one of nine colleges of RIT, NTID is part of RIT's campus in suburban Rochester. NTID's academic and residential complex includes three residence halls, two academic buildings, and a dining commons. In addition, NTID students jointly use all RIT facilities with hearing students from other RIT colleges.

DEAFNESS AND THE INSTITUTIONS' PHILOSOPHY OF DEAF EDUCATION

Gallaudet, MSSD, KDES, and NTID primarily serve students with severe and profound hearing losses. The extent of hearing loss is measured by decibels (db), or the point at which a human ear perceives sound. The normal threshold of hearing is called "0 db." A whisper registers at 30 db, a normal conversational tone at 60 db, and a shout at 90 db. A hearing threshold of 55-69 db is generally recognized as a moderately severe hearing loss; a threshold of 70-89 db as a severe loss and a hearing threshold of 90 db or more as a profound hearing loss. At a threshold of 90 db, an individual "would miss everything the human voice is likely to produce, as well as almost every other sound that has meaning in human culture."¹

Deafness itself does not affect a person's intellectual capacity or ability to learn.² However, the degree and onset of hearing loss are two factors which may influence a deaf person's school achievement. Onset of hearing loss indicates extent of exposure to language. Because children normally learn to speak and understand language by listening, the earlier a hearing loss occurs, the greater adverse impact it will have on the person's mastery of language and resulting ability to speak or lip read.

¹Beryl Lief Benderly, Dancing Without Music, Garden City, 1980, page 30.

²Gallaudet College and the National Association of the Deaf, Deafness, Gallaudet College, 1984.

Students enter Gallaudet College, MSSD, KDES, and NTID from diverse educational backgrounds, including public schools with special classes for the deaf or integrated classes for hearing and deaf students and private or state schools for the deaf. Consequently, entering students at the four institutions have varying types and levels of communication skills. For example, students from "integrated" programs may have received training in lip reading or speech, with little or no training in sign language. Conversely, students from schools for the deaf may have learned to use sign language exclusively. To accommodate students with both oral and sign language backgrounds, the four institutions' philosophy of deaf education generally requires that the instructional faculty use any one communication strategy individually or in combination with other strategies, such as speech, sign language, facial expressions, and hand gestures. Thus, students from either sign language or oral backgrounds may benefit from this communication philosophy.

OBJECTIVES, SCOPE, AND METHODOLOGY

In an April 19, 1984, letter (see app. I) from the Chairman, Subcommittee on the Handicapped, Senate Committee on Labor and Human Resources, and in subsequent discussions with the staff, we were asked to review certain aspects of the operations of Gallaudet College, MSSD, KDES, and NTID. Specifically, we were requested to review

- the numbers, characteristics, and qualifications of the students;
- the types and costs of services provided;
- students' graduation and employment rates;
- faculty compensation and other school expenditures in comparison with those at other institutions; and
- the relationship between NTID and its sponsoring institution, RIT, especially pertaining to the number of NTID students who apply to and are admitted into RIT.

We conducted our fieldwork at Gallaudet from April to December of 1984 and at NTID from May to September of 1984. We performed our review in accordance with generally accepted government auditing standards. We discussed this report with Gallaudet and NTID officials and made changes where appropriate. Details of our audit methodology are described below.

Information on students and services

To obtain the most recent information on numbers, characteristics, and qualifications of students, and graduation and placement rates, we reviewed for school years 1982-83 and 1983-84 each institution's admission criteria and procedures; applicant and student files; and admission, graduation, and placement records. We also interviewed school officials. To the extent possible, data on NTID students were generated from NTID's computer system; however, we did not verify these data.

Regarding Gallaudet College, we confined our review primarily to its undergraduate program because it serves mostly deaf students. In contrast, we did not review Gallaudet's graduate program in depth because according to Gallaudet's vice-president for Administration and Business, historically about 70 percent of the college's graduate students have been "hearing" students.

To obtain information on the types and costs of services provided, we reviewed each institution's budget, expenditure reports, and related records and documents and interviewed school officials.

Comparison of expenditures

To compare expenditures at Gallaudet and NTID with expenditures at other institutions, we used 1981-82 data compiled by the National Center on Higher Education Management Systems (NCHEMS) supplemented by data from Gallaudet and NTID. NCHEMS, an ED contractor, synthesizes financial data reported to ED by institutions of higher education in ED's annual Higher Education General Information Survey (HEGIS). The 1981-82 information was the most recent available at the time of our review. In that year, 91 percent of the nation's higher education institutions, including Gallaudet College and RIT, responded to the financial portion of the survey.

Higher education institutions participating in HEGIS report expenditures in nine categories (see app. II for definitions): instruction, research, public service, academic support, student services, institutional support, plant operations and maintenance, scholarships and fellowships, and mandatory transfers from current funds. These categories, as defined by ED, comprise an institution's total educational and general expenditures. We compared NTID's and Gallaudet's total educational and general costs per student with the average of these costs at selected institutions. We also compared the costs per student in seven of the nine expenditure categories. We did not compare costs for scholarships and fellowships, and mandatory transfers

because they comprise 1 percent or less of Gallaudet's and NTID's total costs. The costs per student were computed by NCHEMS.

Because Gallaudet College is the only 4-year liberal arts college for the deaf in the world, we were not able to compare its costs and other features to similar institutions in the nation serving the deaf. Similarly, NTID's program for the deaf can also be considered unique. We, therefore, compared (for informational purposes only) Gallaudet and NTID to postsecondary institutions which serve hearing students. As a result, we cannot use the comparisons to reach conclusions about the reasonableness of Gallaudet's or NTID's costs.

NCHEMS groups higher education institutions according to the type and number of degrees granted, thereby allowing us to compare Gallaudet's and NTID's expenditures per student with expenditures at similarly classified "hearing" institutions. According to NCHEMS, Gallaudet is a "comprehensive" institution, 1 of 419 participating in the 1981-82 survey. ("Comprehensive" institutions are described as having strong, diverse post baccalaureate programs, but do not offer significant doctoral-level instruction.) Thus, we compared Gallaudet's expenditures per student to the average of the expenditures per student at 259 public comprehensive institutions and 160 private comprehensive institutions.

We also compared Gallaudet's costs with the median costs for 19³ of the 20 institutions with 1,000 to 3,000 students having the highest total educational and general expenditures per student. (We excluded 1 of the 20 institutions, California Institute of Technology, in our comparison because we believe that its comparatively higher research budget and total costs make it not comparable to the other institutions. For example, its cost per student for research (\$18,652) was 16 times higher than that of the institution with the second highest cost (\$1,180).) Gallaudet officials had selected these 20 institutions to compare Gallaudet's instructional cost per student with theirs because the officials believe that, like Gallaudet, these schools offer "quality" education as measured by a high degree of individual contact between students and faculty.

³The 19 institutions in the comparison group are: Alfred University, Amherst College, Atlanta University, Bowdoin College, Bryn Mawr College, Claremont Graduate School, Earlham College, Grinnell College, Hamilton College, Haverford College, Mount Holyoke College, Oberlin College, Pomona College, Smith College, Swarthmore College, University of the South, Wellesley College, Wesleyan University, and Williams College.

Because NTID is primarily a 2-year technical institution, we compared NTID's expenditures per student to the average expenditures per student at the 444 2-year vocational-technical institutions which responded to the HEGIS survey, including 273 public 2-year vocational-technical institutions and 171 private 2-year vocational-technical institutions. We obtained NTID's expenditure data from NTID because, as a college of RIT, NTID's expenditures are not separately reported in the HEGIS survey. We also compared NTID's general and educational expenditures per student with expenditures per student at RIT, NTID's sponsoring institution.

To illustrate the relative costs of educating postsecondary deaf and hearing students in a liberal arts program, we obtained the most recent expenditure data (1983-84) from California State University at Northridge, the sponsoring institution for one of the nation's four federal regional postsecondary programs for the deaf. (Of the four programs, Northridge's is the only 4-year liberal arts program.) Deaf students enrolled in the program take classes with hearing students in regular Northridge classes. Each class is provided with an interpreter or note-taker. If needed, deaf students are provided with tutors. Because of the differences in the deaf education programs at Gallaudet College and Northridge, we cannot conclude that Gallaudet's total cost per student should (1) be the same as Northridge's program for deaf students or (2) differ from other hearing institutions to the same extent as Northridge's program for the deaf differs from Northridge's regular program.

To compare expenditures at MSSD with expenditures at other institutions, we used the most recent survey data on state residential schools for the deaf published in the April 1983 issue of the American Annals of the Deaf, a national professional journal for educators of the deaf. MSSD is one of 58 state residential schools for the deaf. We compared MSSD's cost per student with the median cost per student for 43 of the nation's 57 other state residential schools. One school did not respond to the survey. One school which responded to the survey did not provide cost per student data. We excluded 12 schools which serve blind and aphasic students because MSSD does not serve such students. This comparison was made only for informational purposes. We cannot reach conclusions about the reasonableness of MSSD's costs from these data because of the 43 schools in the comparison group, MSSD is the only residential school for the deaf which serves just high school students--the others serve students in preschool through grade 12 or in preschool and elementary grades only. Also, per student costs for 9 of the 43 schools include preschool programs. In addition, according to officials at the American Annals of the Deaf, states do not

report expenditure data uniformly and therefore their cost per student data only provide "ballpark" figures.

We were not able to compare expenditures of KDES with other elementary schools for the deaf because comparable financial data on day schools for the deaf were not available.

Comparison of student-faculty ratios

Using the most recent available data compiled by ED from its HEGIS survey, we compared the student-faculty ratios at Gallaudet College and NTID with the student-faculty ratios at other institutions because the student-faculty ratio is one factor contributing to an institution's cost per student. We computed the student-faculty ratios using the average full-time equivalent student body and number of full-time instructional faculty at various types of institutions which reported such data to ED in its HEGIS survey.

We compared Gallaudet's student-faculty ratio for 1981-82 with the average of the student-faculty ratios for about 230 public comprehensive institutions and 140 private comprehensive institutions included in ED's analysis. We also compared Gallaudet's student-faculty ratio with the median ratio for the 19 selected institutions with 1,000 to 3,000 students having the highest total educational and general expenditures per student. Comparable information for 1982-83 was not available from ED.

We compared NTID's student-faculty ratios for 1982-83 and 1981-82 with the average student-faculty ratios for about 825 2-year public postsecondary institutions and 250 2-year private postsecondary institutions included in ED's analysis. In addition, based upon information obtained from RIT, we compared NTID's 1982-83 student-faculty ratio with RIT's 1982-83 student-faculty ratio.

We compared MSSD's 1982-83 student-faculty ratio with the median student-faculty ratio for 43 of the 57 other state residential schools for the deaf based upon data reported in the April 1983 issue of the American Annals of the Deaf. (One school did not respond to the survey. One school which responded to the survey did not provide student enrollment data. In addition, we excluded the 12 schools that serve blind and aphasic students.)

Comparison of faculty compensation

To compare Gallaudet and NTID 1983-84 faculty compensation (salaries and fringe benefits) with those at other institutions, we used data compiled by the American Association of University

Professors (AAUP) in its 1983-84 issue of The Annual Report on the Economic Status of the Profession. The 1983-84 Annual Report contains data from approximately 2,200 reporting institutions of higher education, including Gallaudet. Such data included (1) the average cash salary for all institutional ranks, including full-time professors, associate professors, assistant professors, and instructors; (2) fringe benefits as a percentage of salary; and (3) the average compensation⁴ for "all ranks combined." Data were not available on the average compensation by academic rank. Although NTID's sponsoring institution, RIT, reported its salary data to AAUP, NTID salaries were not separately broken out. Therefore, we obtained NTID faculty salaries from NTID records.

AAUP categorizes reporting institutions similarly to NCHEMS based upon the number and types of academic degrees awarded. According to the classification system, Gallaudet is a "comprehensive" institution (see p. 5). We therefore compared Gallaudet's average salary by rank, fringe benefits percentage, and average compensation for "all ranks combined" with the median values for other comprehensive institutions, which participated in the AAUP survey. We grouped the 295 comprehensive institutions into 220 under public control and 75 under private control. We compared NTID's faculty compensation with compensation at

- seven 2-year vocational-technical institutions located in New York⁵ and

- five New York urban community colleges considered by NTID to be members of its peer group.⁶

We also compared NTID faculty compensation with compensation at RIT.

⁴Compensation represents salary plus the institution's contribution to fringe benefits, such as social security; retirement contributions; life insurance; hospital, medical, and dental insurance; disability income protection; workmen's and unemployment compensation; tuition payments; and housing allowances.

⁵We used New York schools for comparison purposes to minimize the geographical effect on salary differences. For comparing Gallaudet's salaries, we used institutions nationwide because there is only one other comprehensive institution in Washington, D.C.

⁶These include Monroe, Erie, Nassau, Onondaga, and Suffolk.

We determined the median salaries, fringe benefits percentage, and compensation for "all ranks combined" for each comparison group based upon the data reported by AAUP. In RIT's case, we used the average salaries for each rank, fringe benefits percentage, and compensation for "all ranks combined" as reported by AAUP.

We compared MSSD's 1982-83 median salary with the median salary for 38 of the 57 other state residential schools for the deaf. (One school did not respond to the survey. Six schools did not provide median salary data. We excluded 12 schools which serve blind and aphasic students.) We computed the median based upon the median salary at each institution as reported in the April 1983 issue of the American Annals of the Deaf.

Using the 1982-83 data from the American Annals of the Deaf, we also compared MSSD's maximum and minimum salaries for faculty with master's degrees with the median of the maximum and minimum salaries for the state residential schools for the deaf. Of the 57 other state residential schools, 1 did not respond to the Annals Survey. We excluded 12 schools which serve blind and aphasic students. We computed the median of the maximum salaries for 40 schools (4 schools did not report such data) and the median of the minimum salaries for 39 schools (5 schools did not report such data).

In addition, based upon information obtained from MSSD and the District of Columbia Public Schools, we compared the range in MSSD's 1983-84 salaries with the range in 1983-84 salaries of Washington, D.C., public school teachers in order to minimize geographical effects on salaries.

Comparison of executive salaries

Based upon data reported by the College and University Personnel Association (CUPA) in the 1983-84 issue of its Administrative Compensation Survey, we compared 1983-84 salaries of three of Gallaudet's executives and four of Gallaudet's deans with salaries for similar positions at other institutions. We did not compare salaries for those executives and deans whose position descriptions were different from CUPA's position descriptions. Institutions responding to CUPA's surveys reported administrative salaries at an annual, full-time rate, reflecting actual cash earnings and excluding fringe benefits. CUPA classifies the reporting institutions by characteristics, such as size of student body, amount of budget, whether the institution is public or private, and whether the institution is a college or university. We compared salaries of Gallaudet's executives and deans with salaries for similar positions at the forty-three 4-year colleges with budgets greater than \$25 million which reported data to CUPA.

We did not compare salaries of NTID's executives and deans with salaries at other institutions. Because NTID is not a separate institution, but a college within RIT, we do not believe that NTID executive and dean positions are comparable to positions at other institutions.

Information on the relationship
between NTID and RIT

To obtain information on the relationship between NTID and RIT, we interviewed NTID and RIT officials and reviewed the schools' financial, student, and related records.

CHAPTER 2

GALLAUDET COLLEGE

Gallaudet College is a private, nonprofit institution governed by a Board of Trustees. It is the only 4-year liberal arts college for the deaf in the world. Founded in 1856 as the Kendall School for deaf and blind children, the school was incorporated by the Congress in 1857 as the Columbia Institution for the Instruction of the Deaf and Dumb and the Blind. In 1864, the Congress voted to authorize the institution to grant and confirm college degrees in the liberal arts and sciences. And, in 1865 and 1954, respectively, the Congress amended the original act to remove the requirement to serve blind persons, and change the institution's name to Gallaudet College. The 1954 amendment also authorized regular appropriations. (Prior to this time, appropriations to Gallaudet had been made annually on an ad hoc basis.) According to the amendment, the purpose of Gallaudet College is "to provide education and training to deaf persons and otherwise to further the education of the deaf."

OBJECTIVES

To carry out its mission, Gallaudet has programs to improve the quality of life of people who are deaf. In addition to operating the college's undergraduate and graduate programs, Gallaudet (1) provides continuing education which serves the needs of the adult deaf population in the National Capital Area (metropolitan Washington, D.C.) and demonstrates the manner in which these needs can be met nationwide; (2) conducts research on deafness and those problems which impede the progress of deaf people toward their full potential; and (3) disseminates research results to organizations, agencies, educational institutions, and others who are interested in or working with deaf people.

Gallaudet's undergraduate program is described below. In addition, limited information on the graduate program is provided.

DEGREE PROGRAMS AND ACCREDITATION

Gallaudet College offers associate's, bachelor's, master's, and doctor's degrees. Degree programs are offered by Gallaudet's College of Arts and Sciences, School of Communication, and School of Education and Human Services. They include

- an associate's degree program in interpreting,
- a Bachelor of Arts degree program in 26 fields of concentrations,

--a Bachelor of Science degree program in 4 fields of concentration,

--7 master's degree programs, and

--an education specialist degree program and a doctorate in Special Education Administration.

The College of Arts and Sciences is the largest of the three schools comprising Gallaudet College, and it offers majors in such areas as business administration, art, and various disciplines within the humanities, sciences, and social studies. The School of Communication offers majors in such areas as audiology, communication, linguistics, theater arts, and visual media. The School of Education and Human Services offers a teacher preparation program and majors in such areas as counseling, recreation and leisure studies, and educational technology.

Gallaudet College's undergraduate and graduate programs are accredited by the Middle States Association (MSA) of Colleges and Schools, a regional accrediting body for higher education institutions. In addition, several programs have received specialized accreditation by professional associations, including the undergraduate teacher preparation and social work programs as well as six of the eight graduate programs. According to Gallaudet's vice-president for Academic Affairs, two graduate degree programs--educational technology and educational supervision--are relatively new programs and are ineligible for accreditation because not enough students are enrolled. The vice-president also stated that the undergraduate business degree programs are ineligible for accreditation because Gallaudet does not have a separate school or college of business as required by the responsible accrediting association.

REVENUES AND EXPENDITURES

Gallaudet College receives an annual lump-sum federal appropriation for itself, MSSD, and KDES. In fiscal years 1983 and 1984, Gallaudet allotted \$33.9 million and \$37.1 million to the college, respectively, comprising about three-fourths of the college's total revenues for both years. Other sources of revenue included tuition and fees, endowments (less than 1 percent), income from auxiliary enterprises, and federal and nonfederal grants and contracts. For example, during fiscal years 1982 through 1984, Gallaudet received \$1.7 million in federal research grants from ED and the Department of Health and Human Services. In addition, in fiscal year 1984, Gallaudet was awarded or spent \$1.9 million in federal grants for nonresearch purposes. The awarding agencies included ED, the General Services Administration, the Peace Corps, and the National Endowment

for the Humanities. In school year 1933-84, Gallaudet College students were charged \$2,107 per semester for tuition, room and board, and other fees. According to guidelines set in 1968 by the former Department of Health, Education, and Welfare (HEW), ED's predecessor, tuition charges are based on the tuition charges at land grant institutions.

Gallaudet College's appropriations are based on its annual budget request to ED which, in turn, is reviewed and approved by the Office of Management and Budget and the Congress. ED has oversight responsibility for Gallaudet's budget.

The following table shows a breakdown of Gallaudet College's fiscal year 1983 educational and general expenditures of \$36.6 million. An additional \$3.2 million was spent on auxiliary enterprises, making Gallaudet College's total fiscal year 1983 expenditures \$39.8 million. The educational and general expenditure categories are defined by ED (see app. II) and used by all postsecondary institutions which annually report expenditure data to ED.

<u>Expenditure category</u>	<u>Amount</u>
	(000 omitted)
Instruction	\$11,487.0
Institutional support	6,685.8
Operations and maintenance	4,761.5
Academic support	4,467.0
Student services	2,803.6
Public service	2,567.1
Research	2,561.4
Scholarships and fellowships	1,300.3
Mandatory transfers	8.3
Total	<u>\$36,642.0</u>

In fiscal year 1983, Gallaudet College spent about 49 percent of its total educational and general expenditures on instruction (\$11.5 million) and institutional support (\$6.7 million). The remainder was spent on operations and maintenance (13 percent), academic support (12 percent), student services (8 percent), public service (7 percent), and research (7 percent). In addition, scholarships and fellowships, and mandatory transfers comprised 4 percent of the college's educational and general expenditures.

WHO THE INSTITUTION SERVES

Gallaudet College admits qualified deaf applicants from the United States and foreign countries, including those with one or more physical disabilities, such as visual impairments, cerebral palsy, and multiple sclerosis. In addition, Gallaudet College admits hearing applicants to its interpreter training degree program. The Gallaudet admissions policy states that the College admits students without regard to sex, religion, race, color, and national and ethnic origin.

Admissions criteria

Students are admitted to Gallaudet College based upon hearing loss and academic achievement as demonstrated on standardized tests. To be admitted, applicants must have a hearing loss which makes it difficult for them to attend a college or university designed for students with normal hearing. According to a Gallaudet College admissions official, to be admitted to Gallaudet College, applicants generally must have a hearing loss of at least 60-70 db in the better ear.

Regarding academic achievement, applicants must demonstrate a proficiency in English and mathematics as measured by the Scholastic Aptitude Test (SAT) or the American College Test (ACT). Although preferred, high school completion is not required if the applicant meets the achievement test requirements.

Applicant selection procedures

Admission decisions are made by Gallaudet's Director of Admissions and an admissions committee consisting of four faculty members. Applicants must submit completed application packages by January 1 for enrollment the following September. Each application package contains:

- a completed application,
- SAT or ACT scores,
- an audiogram,
- a high school transcript, and
- recommendations from high school personnel regarding the applicant's character and motivation for college studies.

For applicants scoring below a Gallaudet-designated percentile on the SAT or ACT, or who did not take one of the two examinations, Gallaudet administers a battery of tests in reading comprehension, vocabulary, writing composition, arithmetic skills, elementary and intermediate algebra skills, and logical relationships.

Based upon the applicant's achievement test scores, entering students are placed in either the freshman class or the School of Preparatory Studies (see p. 23). The School of Preparatory Studies (or "prep" program) was established in 1920 to provide remedial instruction to students who were not academically ready for undergraduate studies. Gallaudet College estimates that about 75 percent of its entering students are placed in this program each year.

According to the "prep" program's assistant to the dean for instruction, a "prep" student may enter the freshman class after completing the 1-year "prep" program if he or she receives at least a 2.0 (out of 4.0) grade point average, favorable behavior reports, and acceptable scores on standardized placement tests in English and math. If "prep" students fail any courses or exams, they may enter the freshman class with the condition that (1) they must pass English courses or the English placement exam within two semesters and (2) by the end of the fourth semester, they must pass incompletes or failed courses or the appropriate placement tests. According to the "prep" program's dean, in school year 1983-84, 90 (44 percent) of 205 students completing the "prep" program were given freshman placement with these conditions.

To be admitted into Gallaudet, foreign applicants must receive the minimum cutoff scores required of U.S. citizens and, additionally, receive scores in reading, vocabulary, and logical relationships that do not indicate the need for remedial instruction. In keeping with this requirement, foreign applicants are not admitted into the "prep" program.

According to an admissions official, the admissions committee may review, on a case-by-case basis, applicants who do not meet all admissions criteria or application requirements. For example, if an applicant scores below the minimum math admissions requirement, but above the minimum English requirement, the committee may decide to admit the applicant. If the committee decides to reject the applicant, the applicant may appeal the decision. In such cases, the applicant may be retested or Gallaudet admissions officials may consider extenuating circumstances pertaining to the applicant's eligibility. According to an admissions official, less than 1 percent of the committee's decisions are appealed.

We did a limited review of rejected and accepted applicants for the fall 1984 entering class to see if the college followed its admissions procedures. Our review of files of 26 of 760 accepted applicants indicated that the applicants met all admissions requirements. (Four hundred and twelve students subsequently registered for the 1983-84 school year.) Our review of 68 of 675 rejected applicants indicated that the applicants failed to meet, at a minimum, the achievement test requirement for admission.

Student enrollment

According to the vice-president for Academic Affairs, Gallaudet College has never set a student enrollment capacity or rejected a qualified applicant because of lack of space. In the 1984-85 school year, the Gallaudet College student enrollment was 2,000, including part- and full-time undergraduate and graduate students and nondegree students. The table below shows Gallaudet's student enrollment from school years 1978-79 to 1984-85.

<u>School year</u>	<u>Number of students enrolled</u>
1978-79	1,608
1979-80	1,480
1980-81	1,401
1981-82	1,436
1982-83	1,510
1983-84	1,618
1984-85	2,000

Of the 2,000 students enrolled in the fall of 1984, 1,372 (69 percent) lived in Gallaudet dormitories.

Residential capacity

Gallaudet College has operated under its residential capacity since at least school year 1981-82, as indicated in table 1 on page 17. Residential capacity is based upon the total number of beds available in Gallaudet dormitories. For example, in fall 1981 and fall 1982, Gallaudet dormitories operated at 15 percent below capacity; in fall 1983, 13 percent below capacity; and in fall 1984, 12 percent below capacity. In addition, dormitory occupancy in the spring of school years 1981-82 through 1983-84 was lower than fall occupancy and thus, the number of unoccupied beds was even greater in the latter part of these school years.

Table 1

Gallaudet College Residential Capacity for
School Years 1981-82 through 1984-85

<u>Year</u>	<u>Number of students in the Gallaudet dormitories</u>	<u>Dormitory capacity</u>	<u>Number of unoccupied beds</u>	<u>Percent of unoccupied beds</u>
1981-82				
Fall	1,036	1,214	178	15
Spring	1,018	1,214	196	16
1982-83				
Fall	1,035	1,214	179	15
Spring	956	1,214	158	21
1983-84				
Fall	1,175	1,349	174	13
Spring	1,049	1,349	258	22
1984-85				
Fall	1,372	1,564	192	12

Recruitment efforts

Gallaudet College officials stated that recruitment efforts need to be improved in order to increase the pool of qualified applicants. In this regard, Gallaudet officials estimated that in each year from 1979 to 1983, on the average about

- 50 percent of those who applied met Gallaudet's minimum admissions test score requirements,
- 58 percent of those who were accepted enrolled, and
- 70 percent of those who enrolled were placed in the "prep" program.

Gallaudet College recruits applicants nationwide from private or state residential schools for the deaf and public schools with an identifiable deaf student population. The recruitment staff consists of two full-time recruiters who are Gallaudet College alumni. Gallaudet College estimated that recruitment expenditures in fiscal years 1983 and 1984 were \$126,751 and \$142,005, respectively. For fiscal year 1985, the college estimated that expenditures would be at least \$148,000. These expenditures include personnel costs, fringe benefits, travel, printing of publications and catalogues, and other miscellaneous costs.

During their visits to schools, the recruiters inform interested students about Gallaudet's criteria for admission and graduation, and educational opportunities and support services. The recruiters also attend college fairs and provide information on Gallaudet programs and seek assistance from state boards of education and regional schools for the deaf. A Gallaudet official told us, however, that the college attracts only a few high school students at the college fairs.

In July 1984, Gallaudet College entered into a contract with a private consultant to (1) provide training on admissions procedures for the Admissions Office staff, (2) review the organization of the Admissions Office, and (3) recommend college publications that should be used in the recruitment process.

Student characteristics

Based upon the most recent available information at the time of our review, there were 1,258 undergraduates enrolled at Gallaudet College in the fall of 1983, of which 412 were in the entering class. Gallaudet College received 1,435 applications for admissions for the fall of 1983 and accepted 760 (53 percent), while rejecting 675 (47 percent). Of the 760 accepted applicants, 412 (54 percent) registered for the fall quarter of 1983.

Based upon information from the Gallaudet Admissions Office, the following table describes various student characteristics of the 412 entering students in the fall of 1983. Similar information for the 1,258 undergraduate student body was not readily available nor was complete data for all 412 students available from school records.

Table 2
Gallaudet College Fall 1983
Entering Class Characteristics

<u>Student characteristics</u>	<u>Number of entering students</u>	<u>Percent of total entering students</u>
Sex:		
Male	150	36.4
Female	262	63.6
Total	412	100.0
Degree of hearing loss (db):		
90 db or greater	262	63.6
70-89	98	23.6
50-69	24	5.8
Under 50	1	.2
Unavailable	27	6.8
Total	412	100.0
Onset of deafness:		
Less than 1 year old	335	81.3
1 to 5 years old	60	14.6
6 to 10 years old	8	1.9
11 to 20 years old	8	1.9
Over 20 years old	1	.3
Total	412	100.0
Ethnic/national origin:		
U.S. citizens or residents:		
White	322	78.2
Black	19	4.6
Hispanics	13	3.1
Asian-American	8	1.9
American Indian	0	0
Non-U.S. citizens	27	6.5
Unavailable	23	5.7
Total	412	100.0
Prior school attended:		
Public high schools (mainstreamed)	128	31.1
Residential schools for the deaf	233	56.5
Unavailable	51	12.4
Total	412	100.0
Geographic distribution:		
Northeast	76	18.4
North Central	94	22.8
South	133	32.3
West	79	19.2
Outside of the United States	25	6.1
Unavailable	5	1.2
Total	412	100.0
Age group:		
17-18 years old	15	3.6
19-20 years old	284	69.0
21-22 years old	66	16.0
Over 22 years old	43	10.4
Unavailable	4	1.0
Total	412	100.0

Of the 412 entering students in fall 1983, 262 (64 percent) were female and 150 (36 percent) were male. Similarly, the applicant pool and the accepted applicants were comprised of more females than males. In the fall of 1983, 55 percent of the applicant pool were females, and 58 percent of those accepted were females. According to a Gallaudet official, more women than men apply to and enroll in Gallaudet College because women tend to choose liberal arts schools, while men tend to choose technical schools.

Table 2 also indicates that for those entering students for which data were available, 87 percent had at least a severe hearing loss of 70 db, and 64 percent were profoundly deaf with hearing losses of 90 db or greater. We compared admission test scores of 26 accepted students receiving the highest examination scores with 24 rejected students receiving the lowest examination scores and found that both the accepted and rejected students had similar hearing losses.

Regarding students' ethnicity, while white U.S. citizens or residents represented 78 percent of the entering students, they also represented a majority of the applicants and accepted applicants. Based upon information from the Gallaudet admissions office, the table below indicates that 955 (67 percent) of 1,435 applicants for the fall of 1983 were white U.S. citizens or residents, of which 582 (61 percent) were accepted. Gallaudet estimated that 127 (9 percent) of the applicants were black U.S. citizens or residents, of which 32 (25 percent) were accepted. Gallaudet also estimated that the acceptance rate for Hispanic and Asian-American students was 45 percent.

Table 3

Gallaudet College Applicant Acceptance Rate by Ethnicity
(Fall 1983)

<u>Student ethnicity</u>	<u>Applicants</u>		<u>Accepted applicants by ethnicity</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
U.S. citizens/residents:				
White	955	66.6	582	60.9
Black	127	8.8	32	25.2
Hispanic	53	3.7	24	45.3
Asian-American	31	2.2	14	45.2
American Indian/ Eskimo	5	.3	1	20.0
Non-U.S. citizens/residents	156	10.9	37	23.7
Data not available	108	7.5	70	64.8
Total	<u>1,435</u>	<u>100.0</u>	<u>760</u>	<u>100.1</u>

Table 2 on page 19 indicates that of the entering students, 57 percent attended residential schools for deaf persons, 69 percent were between 19 and 20 years old, and about 93 percent resided in the United States. According to Gallaudet officials, no new students enrolled from Mississippi, Wyoming, or the District of Columbia.

Availability of student information

During our efforts to determine the size and characteristics of Gallaudet College's applicant pool, entering class (freshmen and "prep" students), and student body for school years 1981-82 through 1983-84, we found that Gallaudet (1) has not automated data on such student characteristics as degree of hearing loss, age, ethnicity, state of residence, and type of high school attended and (2) does not maintain and update its computerized enrollment files to reflect on an annual basis such information as the number of registered students, entering students, graduates of the "prep" and undergraduate programs, and dropouts. Therefore, as of the fall of 1984, student characteristic data (e.g., hearing loss and ethnicity) had to be obtained manually from student files and applicant data by characteristics other than sex had to be obtained from application packages submitted during the previous academic year. Furthermore, based on our limited review of Gallaudet's enrollment data for entering students in the fall of 1983, we found discrepancies between the enrollment data manually developed by the admissions office and the official year end enrollment reports prepared by the registrar. Gallaudet officials stated that these discrepancies exist because the admissions office and the registrar's office do not use the same time periods in reporting enrollment information.

An admissions official stated that in the latter part of fiscal year 1984 Gallaudet College purchased a new computer software package for expanding its data base and improving the reporting functions. In addition, the official stated that our requests for certain types of student information helped Gallaudet to develop a system that will collect more consistent and complete enrollment data and to revise the reporting procedure for student enrollment information in the future.

TYPES AND COSTS OF SUPPORT SERVICES

In keeping with its mission "to provide education and training to deaf persons and otherwise further the education of the deaf," Gallaudet College provides various support services. These services are provided to undergraduates in Gallaudet's

regular and "prep" programs, graduate students, and international interns. Visitors, parents, faculty, and staff may also receive services.

We reviewed the following support services provided by Gallaudet:

- School of Preparatory Studies' academic and support services.
- Audiology.
- Counseling.
- Placement.
- Sign communication and cued speech.
- Interpreting.
- Tutoring.
- Notetaking and other special services.
- On-campus and off-campus activities for promoting deaf education in the international community.

As the table on the following page indicates, in fiscal year 1984, these services were budgeted for \$3.9 million, representing 8.1 percent of Gallaudet's total budget.

Table 4

Budgeted Costs of Gallaudet College Support Services
(Fiscal Year 1984)

<u>Type of service</u>	<u>Cost of service</u>	<u>Percent of total budget</u>	<u>Number of full-time professional staff</u>
School of Preparatory Studies	\$1,880,477	3.9	60
Counseling and placement	538,217	1.1	13
Sign communication	404,471	.9	8
Hearing and speech clinic	285,531	.6	6
Interpreting services	189,192	.4	5
Cued speech program	160,355	.3	3
Tutorial services	155,562	.3	4
International Center on Deafness	150,326	.3	3
Student special services	81,204	.2	2
New student orientation programs	24,550	.1	1
Total	<u>\$3,869,885</u>	<u>8.1</u>	<u>105</u>

School of Preparatory Studies

In fiscal year 1984, the School of Preparatory Studies' budget was \$1,880,477 or 3.9 percent of Gallaudet's total budget. The "prep" program, located on a separate campus, offers an academic program for entering students who do not meet the criteria for the regular freshman program. The "prep" program emphasizes the acquisition of basic skills and knowledge in English, mathematics, science, communications, and physical education. The program also includes personal and academic counseling, health services, tutorial assistance, a library, computer services, intramural activities, and residence activities that stress the development of the individual academically, physically, socially, and emotionally. "Prep" students also receive services at Gallaudet's main campus, including cultural, recreational, and transportation services.

During the fall of 1984, the School of Preparatory Studies enrolled 298 students and consisted of 60 professional staff, including a dean, an assistant dean, directors for academic development and intramurals and recreation, 45 faculty members,

4 developmental counselors, 3 coordinators of residence education, an audiologist, an auditory habilitationist, a tutorial specialist, and a library assistant.

The Counseling and Placement Center

In fiscal year 1984, the Counseling and Placement Center budget was \$538,217 or 1.1 percent of Gallaudet's total budget. The center offers career and personal counseling to Gallaudet students on an individual or group basis. Career counseling includes assisting students in writing resumes; exploring and evaluating career opportunities; identifying values, skills, interests, and personality characteristics and relating them to different career options; and selecting a major field of study. Personal counseling involves providing long-term and crisis counseling and training student peer advisors.

In addition, through placement services, the center (1) provides on-campus recruiting by the private sector, federal and state agencies, public school systems, and residential schools for the deaf; (2) offers seniors and graduate students a credential file service with files that include resume information, grade reports, and letters of recommendation; and (3) lists job openings, job-related workshops, on-campus recruiters, and other placement information. The center also offers job placement services to former Gallaudet students and alumni and makes employment referrals upon request from hearing impaired individuals.

During fiscal year 1984, the center consisted of 13 professionals, including the director; a placement officer; 2 staff psychologists; and 9 career, personal, and placement counselors. Information was not available at the time of our review on the number of participants served in fiscal year 1984. However, in fiscal year 1983, career and personal counseling was provided to about 400 students, and placement counseling was provided to about 541 students and alumni individually and 317 students and alumni in group settings.

Sign Communication

In fiscal year 1984, the Sign Communication Department budget was \$404,471 or about 1 percent of Gallaudet's total budget. Gallaudet estimated that about two-thirds of the department's budget was for sign language training programs, and one-third for nondegree credit courses open to the public.

The Sign Communication Department provides sign language instruction to new undergraduate and graduate students and Gallaudet employees. For example, the department provides sign

language instruction to new faculty members during a mandatory 8-week summer orientation program. The department also provides sign language instruction upon request to KDES and MSSD faculty, staff, and students' families and to noncampus groups. In addition, the department offers intensive training in sign language to "hearing" families with deaf children.

During fiscal year 1984, department staff consisted of six faculty members and two sign language instructors. A Gallaudet official estimated that they provided sign language instruction to about 290 students and 1,695 nonstudents, including families, faculty, staff, and private citizens.

Hearing and Speech Clinic

In fiscal year 1984, the Hearing and Speech Clinic's budget was \$285,531. The clinic, which is located in Gallaudet's Audiology Department, serves as a practicum site for graduate students majoring in audiology. Clinic staff provide training and supervision to these graduate students and clinical services to students and their families, faculty, and staff. In addition, individuals not associated with the college may receive services for fees. Services include audiologic assessments, hearing aid checks and evaluations, special auditory tests, speech therapy, language development, lipreading, hearing aid orientation, counseling, and assistance in communication skills.

The clinic staff also conduct research and provide consultation and in-service training to individuals and outside agencies. Such services include

- conducting clinical research meetings and disseminating results in publications;
- providing in-service activities, such as parent and new advisor orientations; annual seminars to lawyers, campus ministers, and nursing home personnel; and radio and television forums;
- consulting with individuals and agencies, including a KDES child study team; and
- providing audiological services for some infants enrolled in the KDES parent-infant program.

During fiscal year 1984, a Gallaudet official estimated that the clinic provided diagnostic and rehabilitative services to about 2,200 students and 1,300 nonstudents. The staff consisted of six full-time professionals, including five audiologists and a speech pathologist; a part-time audiology faculty member; and a part-time electronic services coordinator.

Interpreting Services

In fiscal year 1984, the Interpreting Services' budget was \$189,192. The Interpreting Services staff provides on-campus interpreting for Gallaudet's students, faculty, and staff. Interpreters may serve in off-campus intracollegiate student organizational meetings; student medical emergencies; on- and off-campus symposia, conventions, workshops and seminars; and student, faculty, and staff interviews. The staff also provide interpreting services to hearing impaired persons enrolled in adult education courses in the community.

From June 1983 through May 1984, a Gallaudet official estimated that the interpreting service unit, including a coordinator and 4 interpreters, provided 7,476 hours of services to students, faculty, and staff.

Cued Speech

The fiscal year 1984 budget for the Office of Cued Speech programs was \$160,355. Cued speech is a relatively new method of communication that when used with lipreading enhances the deaf person's recognition of the sounds of speech. Lipreading alone generally provides only 30 to 40 percent recognition. When combined with cued speech, however, recognition increases to 90 percent or more. Cued speech involves the use of eight hand shapes and four hand locations at or near the mouth and it allows deaf children to learn the sounds of speech visually in much the same way normal children learn through hearing.

The Office of Cued Speech provides instructional services to graduate audiology majors, individuals, and other deaf education programs. The office also (1) performs research on and develops communicative devices for deaf and hearing individuals; (2) assists in adopting cued communication into residential, day, and public schools with an identifiable deaf student population ("mainstreamed") or clinical settings; (3) develops and disseminates information; (4) counsels parents and teachers about cued speech; and (5) conducts workshops and short courses on- and off-campus.

During fiscal year 1984, Gallaudet estimated that the Office of Cued Speech served at least 2,000 clients and disseminated instructional publications and information to more than 6,000 people. The Office of Cued Speech consisted of three staff, including the director, a research aide, and an instructor/materials specialist.

Tutorial services

In fiscal year 1984, the Tutorial Center budget was \$155,562. The Tutorial Center provides academic support services to undergraduate students, individually or in small groups, for all courses except English. The center also provides training in study skills and supplemental instruction for specific courses. Tutorial services were requested primarily in five subjects, including math, foreign language, business administration, art history, and social studies. Students may request or may be referred by faculty for tutorial services.

During fiscal year 1984, a Gallaudet official estimated that the center provided 5,503 hours of tutoring services to 378 students. The center staff consisted of the director and three tutorial specialists.

International Center on Deafness

In fiscal year 1984, the budget for the International Center on Deafness was \$150,326. The center coordinates, facilitates, and administers Gallaudet College's international on-campus and off-campus activities. For example, the center directs an on-campus international internship program for foreigners who spend from 1 month to 1 year learning about selected aspects of deaf education through classroom observation, and seminars and courses on deaf education taught by the center's staff. In addition, the center's staff participate in international conferences and symposia primarily in France, Costa Rica, Panama, and Indonesia.

According to a Gallaudet official, during fiscal year 1984, the center conducted five seminars and sponsored eight international internships involving 55 participants from 15 countries. According to the official, the center also conducted 17 activities in 13 countries, including 8 training seminars and consultations, 5 administrative site visits and program planning activities, and 4 international symposia and conferences.

During fiscal year 1984, the center staff consisted of three professionals, including the director, assistant director, and a Latin American deaf education specialist. In addition, 24 other Gallaudet staff and faculty members traveled internationally for center-related activities (about 6 percent of the center's budget was used for their travel expenses).

Student Special Services

The fiscal year 1984 budget for the Student Special Services was \$81,204. The Student Special Services unit provides support services to students with one or more physical disabilities. Services provided to students include interpreting, note-taking, braille transcribing, and mobility training. In addition, the unit provides training to paraprofessionals.

During fiscal year 1984, Gallaudet estimated that the Student Special Services unit provided services to 107 students, including 77 multidisabled, 23 "deaf-only" students, and 7 hearing students. The multidisabled included 43 who were partially sighted or blind; 24 who had neurological and orthopedic disorders; and 10 with learning disabilities, diabetes, cardiovascular disorders, or other syndromes. The 7 hearing students, including 2 disabled, and 23 "deaf-only" students received paraprofessional training. The unit staff consisted of the director and a student aide coordinator.

New Student Orientation

The fiscal year 1984 budget for the New Student Orientation unit was \$24,550. The New Student Orientation unit provides sign language and orientation programs, including a 3-week intensive program for nonsigning new students and a 10-day orientation program introducing new students to Gallaudet College and the surrounding metropolitan area. The orientation program also includes placement testing, selection and registration for courses, and college survival skills, and it offers a 1-1/2 day orientation for parents of students. The orientation unit also offers a 2-day physical fitness program in the Virginia mountains for new students.

During fiscal year 1984, Gallaudet estimated that these programs served 562 new students and 304 parents. Although the staff consisted of one program coordinator, the services were also provided by volunteer faculty and staff.

GRADUATION AND EMPLOYMENT

Undergraduates at Gallaudet earn Bachelor of Arts and Science degrees by successfully completing required courses in their fields of specialization as well as in a foreign language, social studies, philosophy, laboratory science, English, communication arts, psychology, and physical education. To earn an Associate's of Arts degree in interpreting, students must successfully complete required courses in English, communication arts, interpreter training, sociology, psychology, and physical education. Upon graduation, students may obtain employment or continue their education.

Degree requirements

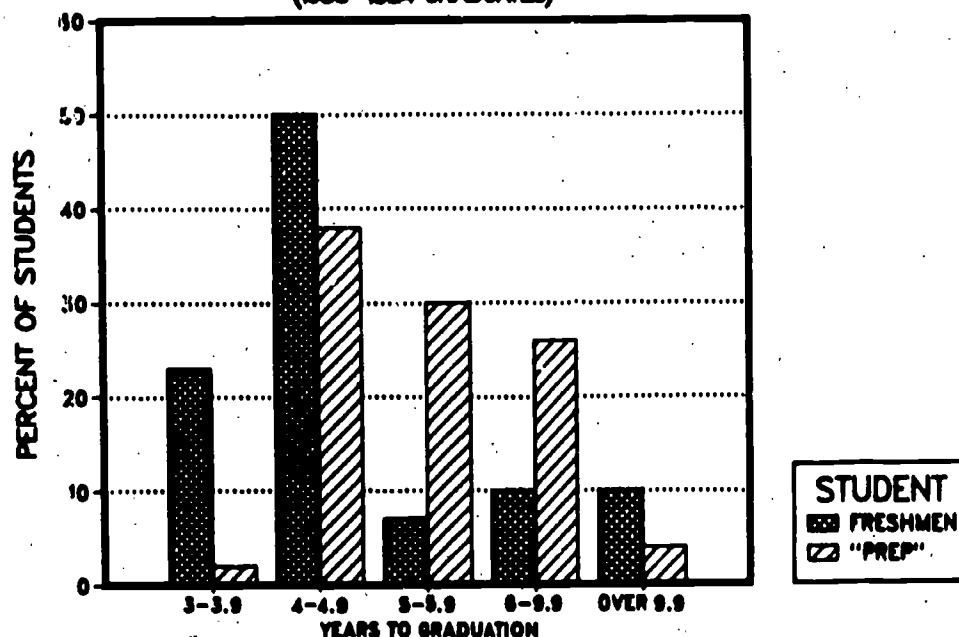
To obtain a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree, Gallaudet students must successfully (1) complete a minimum of 124 hours in core courses and electives, including the course requirements of the student's field of concentration; (2) have at least a 2.0 cumulative grade point average; (3) reside at the college for at least the senior year; and (4) maintain a satisfactory record of conduct. In addition to meeting these bachelor's degree requirements, candidates for a B.A. or B.S. degree in a teacher education program must be admitted into the School of Education and Human Services and its student teaching program and complete all School requirements, including professional education courses.

Requirements for the Associate's of Arts degree in interpreting include the successful completion of a minimum of 62 hours in core and elective courses and a cumulative grade point average of 2.5 or better. In addition, on-campus residence for 2 years is generally required.

Length of stay

To obtain information on how long undergraduates take to complete B.A. and B.S. degrees at Gallaudet, we looked at the length of stay of 1983-84 graduates. The following chart shows the number of years in which 1983-84 graduates completed their studies. We divided them into two groups: those who entered Gallaudet College through its 1-year "prep" program (see p. 23) and those who entered as freshmen. We did not determine the length of stay for the 27 graduates who entered Gallaudet as transfer students from other colleges.

CHART 1
YEARS TO GRADUATION FOR ENTERING FRESHMEN
AND "PREP" STUDENTS AT GALLAUDET COLLEGE
(1983-1984 GRADUATES)



THREE-QUARTERS OF THE GALLAUDET GRADUATES WHO ENTERED AS FRESHMEN COMPLETED THEIR CURRICULUM WITHIN FIVE YEARS. SIXTY PERCENT OF THOSE WHO ENTERED AS "PREP" STUDENTS TOOK MORE THAN FIVE YEARS TO COMPLETE THEIR EDUCATION.

Of the 81 graduates in school year 1983-84 who entered Gallaudet as "prep" students, 48 (59 percent) completed their degrees in 5 or more years, with 24 (30 percent) completing the program in 5 to 5.9 years. Thirty-one students (38 percent) completed their degrees in 4 to 4.9 years. Of the 30 graduates who entered Gallaudet as freshmen, 22 (73 percent) completed their degrees in less than 5 years, with 15 (50 percent) completing their degrees in 4 to 4.9 years.

Characteristics of graduates

According to the most recent available information from Gallaudet College, of the 146 students earning degrees in school year 1982-83, 8 students (6 percent) earned Associate's of Arts degrees in interpreting, 97 students (66 percent) earned B.A. degrees, and 41 students (28 percent) earned B.S. degrees. The

following table shows the number of students earning degrees in each of the College's three schools.

<u>Gallaudet College</u>	<u>Number of graduates in 1982-83</u>	<u>Percent of graduates</u>
College of Arts and Sciences	118	81.0
School of Communication	15	10.0
School of Education and Human Services	<u>13</u>	<u>9.0</u>
Total	<u>146</u>	<u>100.0</u>

Of the 118 students who earned degrees in the College of Arts and Sciences, 25 students (21 percent) majored in psychology or business administration. Other common majors included home economics (10 percent), social work (9 percent), and biology (8 percent).

Of the 15 students who earned degrees in the School of Communication, 8 (53 percent) earned associate's degrees in interpreting, 4 majored in theater arts, and 3 majored in communication arts.

Of the 13 students who earned degrees in the School of Education and Human Services, 5 majored in elementary education; 2 each majored in preschool education, secondary education, and physical education; and 1 each majored in early childhood education and home economics.

Attrition rates

Gallaudet College's attrition rate during school year 1983-84 was 15 percent: Of 1,258 undergraduates, 189 were academically dismissed or withdrew. Of 578 "preps" and freshmen who entered Gallaudet College in school year 1983-84, 141 students (24 percent) were academically dismissed or withdrew. The attrition rate in 1983-84 for "prep" students was 26 percent compared to 23 percent for freshmen.

During school year 1982-83, of 1,097 undergraduates, 125 (11 percent) were academically dismissed or withdrew. In school year 1982-83, the attrition rate among "prep" students was 23 percent compared to 13 percent among freshmen.

Placement of graduates

While many Gallaudet graduates seek and obtain employment soon after graduation, others continue their education at Gallaudet or other institutions. A Gallaudet College survey of 146 students who graduated or were expected to graduate in 1982-83 indicated that 11 months after graduation

--84 (57 percent) were employed;

--35 (24 percent) were in graduate school or otherwise continuing their education, 10 of whom also obtained jobs; and

--8 (6 percent) were unemployed.

Nineteen (13 percent) of the 146 students did not respond to the survey.

Of the 94 students who obtained jobs, 49 (52 percent) obtained jobs in the education field. Of the remaining graduates who obtained non-education-related jobs, 26 (28 percent) were employed by private industry, and 16 (17 percent) by the federal government. (We were unable to determine the type of employment for three survey respondents.) Gallaudet students obtained jobs, such as teachers, tutors, counselors, computer programmers, accountants, laboratory technicians, and language technicians.

From another perspective, of the 94 students who obtained jobs, 47 (50 percent) obtained jobs in institutions for the deaf or otherwise serving the deaf. Seventeen (36 percent) of these students obtained jobs at Gallaudet.

Of the 35 students who continued their education, 30 went to graduate school and 5 continued their undergraduate education.

Gallaudet offers career counseling and placement services to assist students in obtaining employment, including working with employers to identify jobs for students. In addition, the college requires freshmen to take an 8-week, noncredit course which provides students with assistance in writing resumes, career exploration, self-assessment, and career entry skills. (See p. 24 for additional information regarding the counseling and placement services.)

To prepare students for employment, Gallaudet College also has an experiential off-campus education program where students can participate in cooperative education opportunities and

internships with private industry, governmental agencies, and service organizations locally, nationally, and internationally on a part- or full-time basis. The Experiential Program also provides

- training workshops for supervisors who will be working with hearing impaired students;
- training seminars at the worksite for supervisors, managers, and coworkers; and
- informational and skill building workshops for students and faculty sponsors.

In addition, program staff produce written and video materials, including a bimonthly newsletter directed at employment supervisors.

COST PER STUDENT COMPARED
WITH COSTS PER STUDENT AT
OTHER INSTITUTIONS

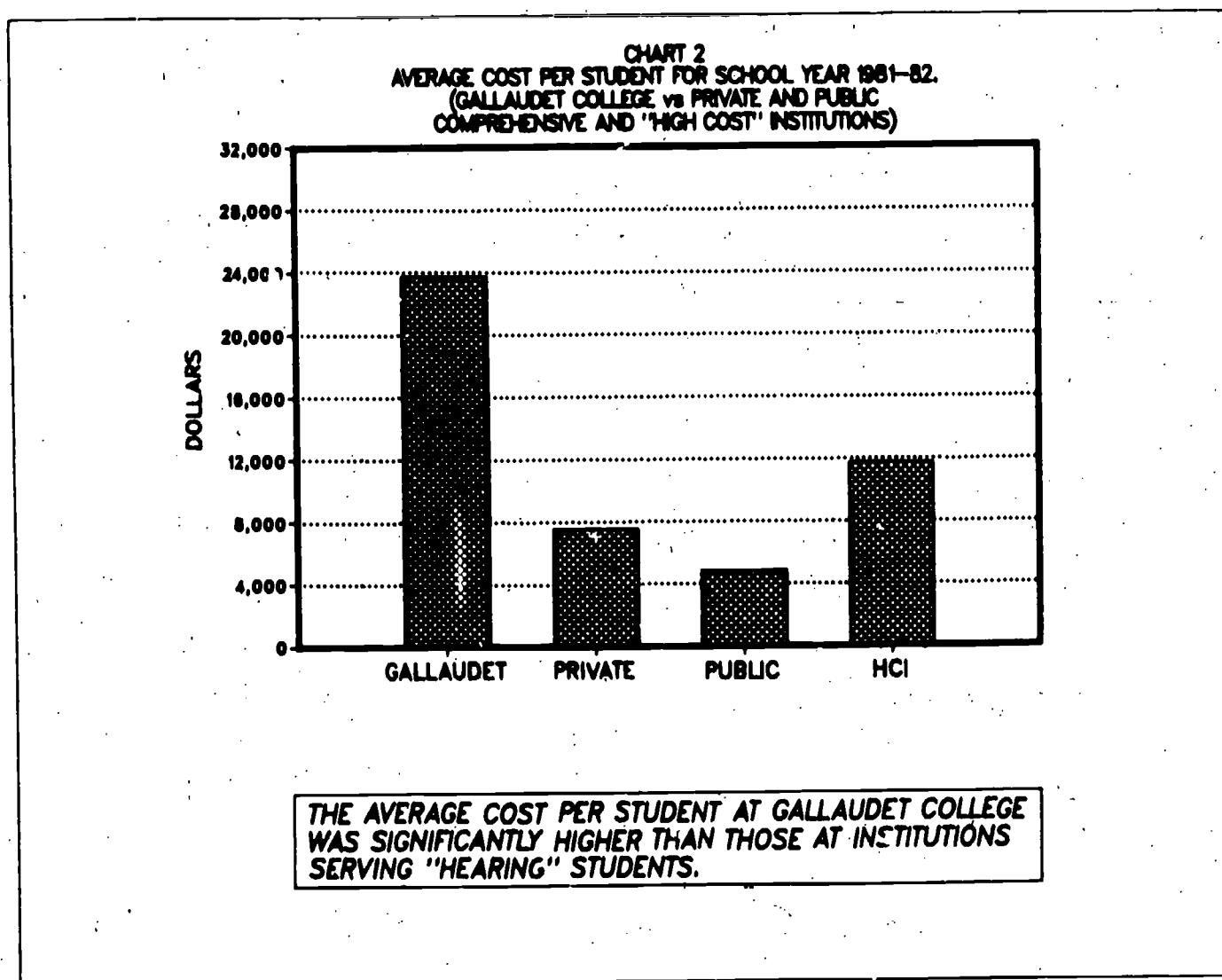
Based on the most recent data available from ED, Gallaudet College's total educational and general expenditures per student for the 1981-82 school year were \$23,772 compared with the costs of \$4,862 for public comprehensive institutions,¹ \$7,553 for private comprehensive institutions, and the median cost per student of \$11,746 for 19 of the nation's 20 institutions² with 1,000 to 3,000 students that have the highest total cost per student. Thus, in school year 1981-82, Gallaudet's educational and general expenditures per student were about

- five times higher than the average cost per student at public comprehensive institutions,
- three times higher than the average cost per student at private comprehensive institutions, and
- two times higher than the median cost per student at the 19 "high cost" institutions (HCI).

¹Comprehensive institutions have strong, diverse post-baccalaureate programs, but do not offer significant doctoral-level instruction.

²California Institute of Technology was excluded from the comparison because its comparatively higher total costs per student and research budget did not make it comparable to the other institutions. See p. 5 for a list of the 19 institutions.

These comparisons and the details to follow are provided for informational purposes only. Because of the lack of baseline information on the costs of deaf education, we cannot attempt to judge the reasonableness of Gallaudet's costs. The results of our comparison are shown in the following chart.



In addition, Gallaudet's 1981-82 cost per student in each of seven of the nine expenditure categories comprising total educational and general expenditures was consistently higher than the costs per student for the private and public comprehensive institutions and "high cost" schools. (We did not compare the cost per student for two of the expenditure categories--scholarships and fellowships, and mandatory transfers--because they comprise only 1 percent of Gallaudet College's total expenditures.) The seven categories for which Gallaudet costs per student were higher and the associated costs are:

<u>Expenditure categories</u>	<u>Gallaudet's 1981-82 cost per student</u>
Instruction	\$6,420
Institutional support	4,527
Plant operations and maintenance	4,047
Academic support	2,446
Public service	2,279
Student services	2,264
Research	1,471

The nine expenditure categories are defined by ED (see app. II) and used by all higher education institutions which annually report financial data to ED in its HEGIS. The results of our comparisons for each expenditure category and the types of costs Gallaudet charged to each are explained below.

Instruction

Our analysis showed that Gallaudet's cost per student for instruction (\$6,420) was about

- three times higher than the average cost for public comprehensive institutions (\$2,222),
- two times higher than the average cost for private comprehensive institutions (\$2,642), and
- two times higher than the median cost per student for the 19 "high cost" institutions (\$4,085).

Moreover, Gallaudet's cost per student for instruction was higher than any of the 19 "high cost" institutions. The highest cost per student for these institutions was \$5,149.

Examples of costs charged to this category by Gallaudet included faculty salaries and fringe benefits as well as costs related to interpreting services, summer programs, the Departments of Sign Communication and of Counseling and Academic Advisement, and the International Center on Deafness. See pages 41 and 42 for a comparison of Gallaudet faculty salaries and its student-faculty ratio with those of other institutions.

Institutional support

Gallaudet's cost per student for institutional support (\$4,527) was about

- eight times higher than the average cost for public comprehensive institutions (\$579),

--three times higher than the average cost for private comprehensive institutions (\$1,375), and

--two times higher than the median cost per student for the 19 "high cost" institutions (\$1,919).

In addition, Gallaudet's cost per student was higher than any of the 19 "high cost" schools. The highest cost per student for these schools was \$3,781.

Examples of costs Gallaudet charged to this category were costs related to the Office of the President, alumni and public relations, development office, safety and security services, general institutional operations, contracts and purchasing, and computer equipment related to business systems.

Plant operations and maintenance

Our analysis showed that Gallaudet's cost per student for plant operations and maintenance (\$4,047) was about

--six times higher than the average cost for public comprehensive institutions (\$643),

--five times higher than the average cost for private comprehensive institutions (\$760), and

--three times higher than the median cost per student for the 19 "high cost" institutions (\$1,573).

Moreover, Gallaudet's cost per student for this category was higher than any of the 19 "high cost" institutions. The highest cost per student for these institutions was \$2,512.

Costs charged by Gallaudet to this category included, for example, physical plant administration; utilities; grounds, custodial, and maintenance services; and renovations.

Academic support

Gallaudet's cost per student for academic support (\$2,446) was about

--five times higher than the average cost for public comprehensive institutions (\$468),

--three times higher than the average cost for private comprehensive institutions (\$731), and

--two times higher than the median cost per student at the 19 "high cost" institutions (\$1,077).

Moreover, Gallaudet's cost per student for this category was higher than any of the 19 selected schools. The highest cost per student for these institutions was \$2,164.

Examples of costs charged by Gallaudet to this category included costs related to its library; computer services; instructional development and evaluation center; and television, printing, and graphic services.

Public service

Gallaudet's cost per student for public service (\$2,279) was about

--16 times higher than the average cost for public comprehensive institutions (\$139) and

--11 times higher than the average cost for private comprehensive institutions (\$204).

The median cost per student for public service at the 19 "high cost" institutions was zero. Gallaudet's cost per student for this category was higher than any of the 19 "high cost" schools. The highest cost per student for these institutions was \$1,069. Eleven of the 19 schools spent no money on public service.

Gallaudet's charges to this category included costs related to its Office of the Vice-President for Public Services, National Center for Law and the Deaf, college press, information center, continuing education program, demonstration programs, and National Academy. The National Academy develops instructional and training materials for use by continuing education and other public service units.

Student services

Gallaudet's cost per student for student services (\$2,264) was about

--seven times higher than the average cost for public comprehensive institutions (\$317),

--four times higher than the average cost for private comprehensive institutions (\$529), and

--two times higher than the median cost per student for the 19 "high cost" institutions (\$913).

In addition, Gallaudet's cost per student for these student services was higher than any of the 19 "high cost" institutions. The highest cost per student for these institutions was \$1,669.

Examples of Gallaudet costs charged to this category included admissions and records, health services, counseling and placement activities, and the Office of Dean of Student Affairs.

Research

Gallaudet's cost per student for research (\$1,471) was about

- six times higher than the average cost for public comprehensive institutions (\$248),
- three times higher than the average cost for private comprehensive institutions (\$455), and
- four times higher than the median cost for the 19 "high cost" institutions (\$332).

In addition, Gallaudet's cost per student for research was higher than any of the 19 "high cost" institutions. The highest cost per student for these institutions was \$1,180.

Examples of Gallaudet's charges to this category included costs for demographic studies, research related to education and human development, and deaf education research regarding linguistics, sensory communications, and cued speech.

COST PER STUDENT DIFFERENCE BETWEEN EDUCATING HEARING AND DEAF STUDENTS

To illustrate the relative costs of educating deaf and hearing postsecondary students, we collected fiscal year 1984 cost information from California State University at Northridge (Northridge), which, like Gallaudet, is a comprehensive institution (see p. 5). In that year Northridge had a student body of 27,600, of which about 200 students were deaf. Northridge's National Center on Deafness is one of four federal regional postsecondary programs for the deaf.³ In fiscal year 1984, it

³The three other postsecondary institutions which receive ED grants to support education programs for the deaf are the University of Tennessee, St. Paul Technical-Vocational Institute, and Seattle Central Community College. In fiscal year 1984, the four institutions were awarded a total of about \$2 million to support the special programs.

received 60 percent (\$496,000) of its total revenue (\$835,845) from ED. The remaining 40 percent (\$339,845) came from Northridge. Based upon data provided by Northridge, its total cost per deaf student was almost twice the total cost per hearing student.

The table below shows the total cost per deaf student and per hearing student at Northridge in fiscal year 1984.

Table 5

Comparison of Cost Per Hearing Student
With Cost Per Deaf Student, University of California
at Northridge
(Fiscal Year 1984)

State funds provided per student (deaf and hearing)	\$3,309
Additional federal funds provided per deaf student	<u>3,081</u>
Total funds per deaf student	<u>\$6,390</u>

In fiscal year 1984, the cost per deaf student at Northridge (\$6,390) was 1.9 times higher than the cost per hearing student (\$3,309). State funds supported educational and general expenditures for hearing and deaf students, including instruction, academic support, student services, institutional support, and plant operations and maintenance. (See app. II for definitions of these expenditure categories.) According to Northridge's acting director of Business Management, Northridge does not expend funds on public service or research activities.

According to its June 1984 report to ED, Northridge's National Center on Deafness, in fiscal year 1984, used federal funds to provide support services for deaf students, including

- speech and hearing rehabilitation,
- interpreting,
- tutoring,
- notetaking,
- personal and career counseling, and
- a 2-week student orientation.

Deaf students at Northridge attend classes with hearing students. Each class is provided with an interpreter and/or note-taker. If needed, students request tutoring services which are provided by deaf and hearing graduate students. Students may receive career placement and other services from Northridge.

Because of differences in the deaf education programs at Gallaudet and Northridge, we cannot conclude that Gallaudet's total cost per student should be (1) the same as Northridge's program for deaf students or (2) twice the total cost per student at comparable "hearing" institutions. Moreover, even if the two programs were more similar, one school's cost per student is not sufficient to establish a baseline for the "reasonable" costs of deaf education.

Gallaudet officials gave us their views on the additional cost of deaf education. According to the vice-president for Administration and Business, Gallaudet's cost per student is higher than the cost per student at "hearing" institutions for the following reasons. (We did not verify the additional costs associated with these reasons.)

- Cost per student for instruction is higher at Gallaudet because of special personnel needed to serve the deaf, such as audiologists and interpreters, and the larger number of instructional faculty needed to support a lower student-faculty ratio. (See p. 41 for a discussion of Gallaudet's student-faculty ratio).
- Cost per student for plant operations and maintenance is higher because of the extra classroom space needed to support a lower student-faculty ratio; the residential square footage at Gallaudet is larger than at other institutions because of Gallaudet's proportionally fewer commuter students and the extra square footage needed to support Gallaudet's public service activities. (The vice-president also noted and we verified that the 1981-82 total cost for plant operations and maintenance decreased by about \$1 million (from \$5.7 million to \$4.8 million) in 1982-83 because of a staff reduction of 100 and certain energy conservation savings.)
- Cost per student for academic support is higher due to the high cost of audiological equipment.
- Cost per student for public service is higher due to costs associated with operating its law center, college press, and continuing education center--facilities which other institutions may not support.

--Cost per student for student services is higher due to high costs associated with providing special services to deaf students, including counseling, psychology, and placement.

STUDENT-FACULTY RATIO COMPARED
WITH THE STUDENT-FACULTY RATIO
AT OTHER INSTITUTIONS

Gallaudet's student-faculty ratio (the ratio of full-time equivalent students to full-time instructional faculty) in school year 1981-82 was 7:1. We compared Gallaudet's student-faculty ratio with the student-faculty ratio at other institutions because it is a major factor contributing to an institution's cost per student. (See p. 33.) The student-faculty ratio does not necessarily infer class size. (We compared Gallaudet's student faculty ratio with the same groups of institutions used for comparing costs per student. See p. 33.)

Based upon the latest available information obtained from ED, we determined that in 1981-82, Gallaudet's student-faculty ratio of 7:1 was almost three times lower than the average student-faculty ratio for either public or private comprehensive institutions (21:1) and two times lower than the median student-faculty ratio (12:1) for the 19 "high cost" institutions selected for comparison with Gallaudet College.

According to top-level Gallaudet officials, deaf students require more individualized classroom attention and, thus, are better served when there are fewer students in the classroom. In addition, Gallaudet College classes are taught with students sitting in a semicircle so they may see each other sign, and thus, class size is also limited by the number of students who can comfortably fit in such a classroom arrangement. According to the vice-president for Administration and Business, if Gallaudet's student enrollment increases, Gallaudet would require instructors to teach additional class sections, rather than increase the number of students per class.

FACULTY COMPENSATION
COMPARED WITH COMPENSATION
AT OTHER INSTITUTIONS

Gallaudet College's 1983-84 average faculty salaries by rank, fringe benefits as a percentage of salaries, and the average compensation (salary plus benefits) for "all ranks combined" are listed in table 6 on page 42. We compared Gallaudet's average faculty compensation with the median compensation for private and public institutions because expenditures for faculty salaries and fringe benefits contribute to instruction costs.

(See p. 35.) We found that while Gallaudet salaries for all ranks were higher than the median salaries for 4-year private and public comprehensive institutions, its fringe benefits were considerably lower. As a result, Gallaudet's average compensation for "all ranks combined" was slightly lower than the median compensation for the comparison schools. Data were not available on compensation by academic rank.

Table 6

Comparison of Gallaudet 1983-84 Average Faculty Compensation With Compensation at Other Institutions

<u>Institution</u>	<u>Median salary</u>				<u>Fringe benefits as percent of salary</u>	<u>Average compensation (salary and benefits) for "all ranks combined"</u>
	<u>Professor</u>	<u>Associate Professor</u>	<u>Assistant Professor</u>	<u>Instructor</u>		
Gallaudet	\$38,600	\$31,800	\$24,700	\$19,400	14	\$32,400
Private comprehensive institutions	35,000	27,700	22,700	19,300	20	32,500
Public comprehensive institutions	33,700	27,600	23,000	18,700	21	33,000

EXECUTIVE SALARIES COMPARED WITH SALARIES AT OTHER INSTITUTIONS

Gallaudet College's 1983-84 salaries (not including fringe benefits) for three top-level executives and four deans are listed in the table on the following page. Based upon information obtained from the College and University Personnel Association, we found that these Gallaudet salaries were slightly higher in five cases and lower in two cases than the median of the salaries for forty-three 4-year colleges with budgets of \$25 million or more. We compared the salaries of those Gallaudet executives and deans whose responsibilities were comparable to the responsibilities for similar positions, as listed by CUPA.

Table 7

Comparison of Gallaudet Administrative Salaries
With Salaries at Other Institutions
(1983-84)

<u>Positions</u>	<u>Salaries at Gallaudet</u>	<u>Salaries at colleges with budgets of \$25 million or more</u>
President	\$83,000	\$77,150
Vice-President for Academic Affairs	62,677	59,400
Vice-President for Administration and Business	60,852	58,795
Dean of Arts and Sciences	42,500	52,500
Dean of Education and Human Services	53,711	49,759
Dean of Student Affairs	51,129	46,443
Dean of Continuing Education	43,088	45,000

We were unable to compare Gallaudet executives' and deans' compensation (salaries and fringe benefits) with compensation at other institutions because institutions do not report fringe benefits to CUPA.

Compared with 4-year colleges with budgets of \$25 million or more, Gallaudet executive salaries were higher by 7.6 percent for the president, 5.5 percent for the vice-president for Academic Affairs, and 3.5 percent for the vice-president for Administration and Business. Salaries of Gallaudet deans were

- higher by 10.1 percent for the dean of Student Affairs,
- higher by 7.9 percent for the dean of Education and Human Services,
- lower by 2.5 percent for the dean of Continuing Education, and
- lower by 19 percent for the dean of Arts and Sciences.

CHAPTER 3

KENDALL DEMONSTRATION ELEMENTARY SCHOOL

On December 24, 1970, the Congress enacted Public Law 91-587, which authorized Gallaudet College to operate KDES as a demonstration school. The act further authorizes Gallaudet to provide

" . . . day and residential facilities for elementary education for persons who are deaf in order to prepare them for high school and other secondary study, and to provide an exemplary educational program to stimulate the development of similar excellent programs throughout the Nation."

As authorized by the act, KDES primarily serves residents of the National Capital Area, which includes the District of Columbia and the suburban areas of Maryland and Virginia. Deaf children may attend KDES from infancy to age 15, but not beyond the eighth grade or its equivalent. KDES is a nonresidential (day) school, but has a group of apartments which are designed to accommodate parents and children who may come to KDES for diagnostic purposes.

OBJECTIVES

KDES adopted several objectives to meet its legislative authorization, including

- improving student communication skills through the use of "total communication" (a philosophy which emphasizes using one communication approach or combination of approaches to fit the situation and the receiver);
- individualizing students' education by using a variety of materials and strategies appropriate to each student's needs;
- helping students develop the skills necessary for successful personal, family, and community living and providing learning experiences which foster the development of a positive self-image; and
- providing opportunities and experiences which encourage students to interact socially with both deaf and hearing persons.

KDES began full-scale operations with federal funding in school year 1971-72 with an entering class of 165. As of fall 1984, KDES had an enrollment of 190.

TYPES OF PROGRAMS AND ACCREDITATION

KDES' instructional program is organized into five departments:

--Preschool.

--Primary.

--Intermediate.

--Middle school.

--A Special Opportunities Program for multihandicapped students.

These programs are nongraded, and students are grouped in classes by ability.

KDES staff, in consultation with parents, annually develop an Individualized Education Program (IEP) for each student. The IEP contains short-term and long-term educational goals for the child and describes the child's current achievement level. KDES maintains a copy of the IEP and sends copies to the child's parents and local school district.

The Preschool Program for children from infancy through 5 years of age includes a parent/infant program and an in-school program. The parent/infant program (see p. 55) is based in the home and focuses on a parent-guided, natural approach to learning as part of the child's daily routine. The in-school program stresses communication skills development, language, fine and gross motor skills, and social-emotional development. Deaf students may interact with hearing students by attending afternoon day care sessions in other settings with hearing students.

The Primary Program, which serves children from ages 5 to 9, continues developing students' language skills. In addition, the program offers classes in the traditional school subjects of math, reading, writing, social studies, and science.

The Intermediate Program for children of ages 9 through 12 provides daily instruction in reading, writing, science, math, and social studies. In addition, students attend weekly library, physical education, home economics, and art classes, supplemented with group counseling meetings, field trips, and computer-assisted instruction.

The Middle School Program serves children from ages 12 to 15. In addition to instruction in math, science, social studies, reading, and writing, students attend such classes as physical education, art, home economics, drama, and personal hygiene.

The Special Opportunities Program serves multihandicapped children from birth to age 15.

The following table shows the ages and number of students served by each program in school years 1982-83 and 1983-84.

<u>Program</u>	<u>Age</u>	<u>Students served</u>	
		<u>1982-83</u>	<u>1983-84</u>
Preschool	birth to 5	37	51
Primary	5 to 9	50	49
Intermediate	9 to 12	47	31
Middle school	12 to 15	37	49
Special opportunities	birth to 15	<u>19</u>	<u>21</u>
Total		<u>190</u>	<u>201</u>

All programs at KDES are accredited by the Middle States Association, Assembly of Elementary Schools, and the Conference of Educational Administrators Serving the Deaf.

REVENUES AND EXPENDITURES

In 1972, the first year of federal funding, KDES received \$1.2 million. In fiscal years 1983 and 1984, KDES received federal funds of \$6.4 million and \$6.7 million, respectively. Federal funds comprised more than 99 percent of KDES' total revenue. The remaining revenue came from other sources, such as vending machine commissions. KDES students do not pay tuition and generally receive free transportation to and from school if they reside within a 15-mile radius of KDES. In fiscal year 1984, KDES spent 49 percent (\$3.3 million) of its total expenditures (\$6.7 million) for direct education and 51 percent (\$3.4 million) for research and demonstration (see p. 57).

Gallaudet College and its Board of Trustees monitor the operation of KDES, while KDES staff develop and manage the KDES educational programs. Gallaudet College's vice-president for Pre-College Programs is the administrative head of KDES. He is assisted by a dean and principal.

WHO THE INSTITUTION SERVES

Public Law 91-587 authorizes KDES to provide education for deaf children from the onset of deafness through the age of 15, but not beyond the eighth grade or its equivalent. In addition, KDES is authorized to serve primarily residents of the National Capital Area.

KDES admissions criteria

KDES has four basic admissions criteria related to degree of hearing loss, residency, age, and secondary handicaps. To be considered for admission, applicants must

- demonstrate a "moderate to severe" hearing loss in the better ear;
- reside with a parent or legal guardian in the District of Columbia or the suburban areas of Maryland and Virginia, and be a legal U.S. resident;
- be between infancy and 15 years of age; and
- demonstrate that his or her primary educational needs are related to deafness--additional handicaps must be of such a nature that KDES can provide services.

In addition, a physical examination and written verification of childhood immunizations are required prior to acceptance.

Applicant selection procedures

The KDES dean makes admissions decisions based upon (1) information submitted by the applicant and (2) the recommendations of a KDES diagnostic evaluation team which administers and evaluates several tests, including audiological and psychological tests. Initial referrals, such as those from parents and school systems, are screened by the assistant to the dean for Admissions, with assistance--in the case of multihandicapped applicants--from the special opportunities supervisor. Based upon the preliminary screening, the assistant to the dean determines whether the child would benefit from KDES services and advises the parent or school system to submit an application, if appropriate.

KDES has a rolling admissions policy, that is, applications are received and evaluated throughout the school year. Specific entry dates are set in September, November, January, and February for students transferring from other schools. However, applicants without placement in a program may be admitted to KDES

as soon as possible. Generally, candidates applying for admission after March 25 are not enrolled until September of the next year. Each completed application package contains

- an application form;

- audiological records;

- educational, psychological, and medical records, and other relevant information; and

- a parental consent form permitting diagnostic testing for the applicant.

Applicants are tested by a KDES diagnostic evaluation team consisting of specialists in such areas as audiology, psychology, speech and language pathology, social work and counseling, and developmental and education assessment. For each applicant, the team conducts a diagnostic evaluation, including audiological, psychological, and speech and language tests. For applicants with possible functional problems, KDES' occupational and art therapist consultant, and other specialists, conduct additional diagnostic evaluations. Each diagnostic team member prepares a written evaluation of each applicant and discusses it in a meeting with the assistant to the dean, the other diagnostic team members, and appropriate KDES staff.

Based upon the diagnostic evaluation, the diagnostic team recommends to the dean for each applicant whether to reject, accept, or accept on a trial basis for a specified period of time. Based on the diagnostic team's recommendations and the dean's review of the applicant's file, he decides whether to accept or reject the applicant. All enrollees with secondary handicaps are admitted on a 3-month trial basis. Preference for admission is given to applicants from the District of Columbia where no other preschool programs for the deaf are available.

We did a limited review of accepted and rejected KDES applicants to see if there were any apparent violations of the admissions criteria. Our review of the files of 19 of the 201 students enrolled in school year 1983-84 indicated that these students met the admissions criteria. We also reviewed the file of the one applicant who was rejected for the 1983-84 school year. According to a KDES admissions official, this applicant was a severely multihandicapped infant, and KDES could not provide the comprehensive one-on-one care needed by the child.

Student enrollment capacity

According to the KDES dean, the KDES building was designed to serve up to 300 students, based on the number and types of instructional classroom space and programs. However, the dean stated that the current enrollment capacity is 200, including high cost Special Opportunities Program students, based on KDES' 1982-85 budget and current staffing plan. The following table shows KDES' enrollment for school years 1980-81 through 1984-85.

<u>Year</u>	<u>Number of students enrolled</u>	<u>Enrollment capacity</u>
1980-81	158	180
1981-82	175	200
1982-83	190	200
1983-84	201	200
1984-85	190	200

KDES does not actively recruit students because recruitment efforts in 1979 through 1982 produced a sufficient applicant pool and continuous referrals for placement. These efforts primarily included making public service announcements on radio and television and developing and disseminating brochures detailing KDES programs. In addition, KDES officials stated that the current lack of emphasis on recruitment is due to budgetary constraints which have forced KDES to limit enrollment to 200 students.

KDES student characteristics

In the fall of 1984, 190 students were enrolled at KDES, of which 22 entered between July and September 1984. According to the assistant to the dean for Admissions, no applicants were rejected from September 1983 through September 1984. The following table shows the characteristics of the fall 1984 student body.

Table 8

KDES Fall 1984 Student Body Characteristics

<u>Student characteristic</u>	<u>Total number of students</u>	<u>Percent of total students</u>
KDES Program Placement:		
Preschool	43	22.6
Primary	42	22.1
Intermediate	33	17.4
Middle	37	19.5
Special Opportunities Program	35	18.4
Total	<u>190</u>	<u>100.0</u>
Sex:		
Male	90	47.4
Female	<u>100</u>	<u>52.6</u>
Total	<u>190</u>	<u>100.0</u>
Degree of hearing loss:		
27-40 db	10	5.3
41-55 db	10	5.3
56-70 db	18	9.4
71-90 db	20	10.5
91 db or greater	<u>132</u>	<u>69.5</u>
Total	<u>190</u>	<u>100.0</u>
Ethnic origin:		
White	63	33.2
Black	97	51.0
Hispanic	14	7.4
Asian/Pacific	12	6.3
Other minorities	<u>4</u>	<u>2.1</u>
Total	<u>190</u>	<u>100.0</u>
Geographic distribution:		
District of Columbia	86	45.3
Maryland	67	35.2
Virginia	<u>37</u>	<u>19.5</u>
Total	<u>190</u>	<u>100.0</u>

Of the 190 students enrolled in KDES in the fall of 1984, 53 percent were female, 47 percent were male, 80 percent had a severe hearing loss of at least 71 db, and 70 percent had a profound hearing loss of 91 db or more. Fifty-one percent were black, and 33 percent were white. In addition, 45 percent of the students resided in the District of Columbia, 35 percent in Maryland, and 20 percent in Virginia. Of the students residing in Maryland, 79 percent were from Prince George's County.

The following table shows the characteristics of the fall 1984 entering students.

Table 9
Characteristics of KDES Students Entering
From July Through September 1984

<u>Student characteristic</u>	<u>Total number of students</u>	<u>Percent of total enter- ing students</u>
KDES Program placement:		
Preschool	14	63.6
Primary	5	22.7
Intermediate	1	4.6
Middle	-	-
Special Opportunities Program	2	9.1
Total	22	100.0
Sex:		
Male	12	54.5
Female	10	45.5
Total	22	100.0
Degree of hearing loss:		
27-40 db	-	-
41-55 db	-	-
56-70 db	4	18.2
71-90 db	4	18.2
91 db or greater	14	63.6
Total	22	100.0
Ethnic origin:		
White	6	27.3
Black	9	40.9
Hispanic	4	18.2
Asian Pacific	1	4.5
Other	2	9.1
Total	22	100.0
Geographic distribution:		
District of Columbia	10	45.5
Maryland	11	50.0
Virginia	1	4.5
Total	22	100.0

Of the 22 students entering in September 1984, 55 percent were male, 46 percent were female, 82 percent had a severe hearing loss of at least 71 db, 64 percent had a profound hearing loss of 91 db or more, 41 percent were black, and 27 percent were white. In addition, 50 percent of the entering students resided in Maryland, 46 percent resided in the District of Columbia, and about 4 percent resided in Virginia.

TYPES AND COSTS OF SUPPORT SERVICES

In keeping with its mission to prepare deaf students in the Washington, D.C., area for high school or other secondary education programs, KDES provides educational programs and services for deaf children with varying abilities and secondary handicaps, and it instructs parents and families in assisting in the learning process. The following were among the services provided in fiscal year 1984:

- Diagnostic support.
- Transportation.
- Outreach.
- Communication and speech.
- Parent-infant.
- Family education.

As the following table indicates, we estimate that in fiscal year 1984 these support services cost \$1.4 million or 22.4 percent of KDES' total budget.

¹These figures are based on KDES' initial appropriation of \$6.4 million. A supplemental appropriation of approximately \$300,000 is not considered in the table. The disposition of these funds was not available at the time of our review.

Table 10

Budgeted Costs of KDES Support Services
(Fiscal Year 1984)

<u>Type of service</u>	<u>Cost of service</u>	<u>Percent of total budget</u>	<u>Number of full-time professional staff</u>
Diagnostic support services	\$ 516,857	8.1	15
Transportation services	476,105	7.5	13a
Outreach	212,967	3.3	11b
Communication and speech	116,085	1.8	4
Parent-infant program	59,786	.9	2
Family education services	<u>49,571</u>	<u>.8</u>	<u>1</u>
Total	<u>\$1,431,371</u>	<u>22.4</u>	<u>46</u>

aTotal excludes a staff of 13 bus drivers since their salaries fall under Gallaudet College's budget.

bTotal includes both MSSD and KDES staff.

Diagnostic support services

The fiscal year 1984 budget for diagnostic support services was \$516,857 or 8.1 percent of KDES' total budget. KDES officials estimated the support services' budget to be 70 percent student related and 30 percent nonstudent related.

The Diagnostic Support Services unit provides comprehensive diagnostic, rehabilitative, and treatment services to promote students' intellectual, personal, social, affective, and physical development. Services include social, diagnostic, psychological, and medical services; audiology; and counseling. Unit staff also interact and consult with visitors, professionals, and parents; publish articles on student development; and direct an assessment center which evaluates both KDES students and non-students.

In fiscal year 1984, the diagnostic support services staff provided services to at least 200 students and 272 nonstudents, including families, practicum students, teachers, faculty, and interns. Unit professional staff consisted of 15 full-time staff members, including an assessment coordinator, social worker, speech/language pathologist, communication specialist, psychologist, occupational therapist, audiologists, electro-acoustic technicians, counselors, and nurses. The unit also employed two part-time staff members: an art therapist and a physical therapist.

Transportation services

The fiscal year 1984 budget for transportation services was \$476,105 or 7.5 percent of KDES' budget. KDES estimated these services to be 100-percent student related.

Transportation services include transporting KDES students living within a 15-mile radius of KDES to and from school daily in Gallaudet College-owned buses. For KDES students living outside the 15-mile radius, transportation is provided if their families transport them to centrally located pickup points within the 15-mile radius.

In fiscal year 1984, the transportation staff, consisting of 13 bus drivers and 13 bus monitors, transported 184 KDES students.

Outreach services

The fiscal year 1984 budget for outreach services was \$212,967 or 3.3 percent of KDES' total budget. KDES and MSSD provide similar outreach services, including training and in-service workshops and presentations, and share the same staff. A discussion of these services can be found on page 69.

Communication and speech services

The fiscal year 1984 budget for communication and speech services was about \$116,085 or 1.8 percent of KDES' total budget. KDES estimated the budget for these services to be 80 percent student related and 20 percent nonstudent related.

The staff provide individual and small group speech and language therapy to KDES students. In addition, they develop and administer diagnostic speech and language evaluations for KDES applicants. The staff also act as resource personnel to the classroom teacher to facilitate the integration of speech activities into daily classroom instruction.

In fiscal year 1984, the staff, consisting of 4 communication and speech specialists, served about 200 students and 36 teachers and family members.

Parent-Infant Program

The fiscal year 1984 budget for the Parent-Infant Program was \$59,786. KDES estimated the budget for this program to be 80 percent student related and 20 percent nonstudent related.

The Parent-Infant Program offers support and guidance to KDES children from infancy to about 2-1/2 years of age and their families who live in the Washington, D.C., metropolitan area. This program is based in the home and encourages parents to use the daily routines of the home to promote learning for their child in a natural way. The home learning environment is used by family members and teachers to provide auditory training and language experiences. The program also includes follow-up and supplementary activities at the school.

In fiscal year 1984, the Parent-Infant Program provided services to 16 KDES children and their families, and 20 visiting professionals. The staff included two instructors.

Family education services

For fiscal year 1984, the family education services budget was \$49,571. KDES estimated the budget for these services to be 30 percent student related and 70 percent nonstudent related.

The family education services consist of special programs, including family sign language instruction geared to parents' needs. Staff provide information and offer assistance during the week and in weekend sessions.

In fiscal year 1984, the family education services served about 120 KDES students and their families. The staff included a coordinator and 10 part-time sign language instructors.

GRADUATION AND FURTHER SCHOOLING

According to the vice-president for Pre-College Programs, KDES, like other elementary schools, has no graduation requirements. However, in order to satisfactorily complete the KDES program, students are expected to have a third grade reading level. This requirement is waived for KDES students entering MSSD because there is no similar high school program in the District of Columbia for KDES graduates.

KDES annually administers the Stanford Achievement Test for the Hearing Impaired (SAT-HI) to KDES students to measure their reading skills. In spring 1984, test results indicated that of 94 students over 7 years of age who took the SAT-HI, 31 were reading at a third grade level or higher.

Length of stay

According to Gallaudet's vice-president for Pre-College Programs, although statistics are not available on the average length of stay for KDES students, he believes that most students enter KDES at the preschool level of 3 years of age and complete the course of study by the age of 15. Students may not attend KDES after their 16th birthday.

Graduation rates

The following table shows the number of KDES students who graduated in each school year since the 1978-79 school year.

<u>School year</u>	<u>Number of students who completed KDES</u>
1978-79	38
1979-80	26
1980-81	10
1981-82	12
1982-83	16
1983-84	8

Student attrition

In school year 1982-83--the most recent year for which information was available--no student withdrew from KDES. In school year 1981-82, 4.4 percent or 9 out of 190 students withdrew from KDES, primarily because of changes in residence and transportation problems.

Post-KDES experience

Students who complete KDES generally continue their schooling at MSSD. The following table shows the number of students from KDES who entered MSSD and other schools for each school year since 1978-79.

<u>Year</u>	<u>Number of graduates from KDES</u>	<u>Number accept & into MSSD</u>	<u>Number accepted into other schools</u>
1978-79	38	34	4
1979-80	26	26	-
1980-81	10	10	-
1981-82	12	11	1
1982-83	16	15	1
1983-84	8	8	-

KDES students who did not continue at MSSD were referred to their local school districts for secondary school placement, or placed in schools for the retarded or for students with emotional or behavioral problems.

COST PER STUDENT

The KDES cost per student in school years 1981-82, 1982-83, and 1983-84, including research and demonstration expenditures, are shown in the following table.

<u>School year</u>	<u>Direct education cost per student</u>	<u>Research and demonstration cost per student</u>	<u>Total cost per student</u>
1981-82	\$15,275	\$16,052	\$31,327
1982-83	16,074	16,864	32,938
1983-84	16,228	17,056	32,284

KDES and MSSD research and demonstration funds support (1) research on deaf education conducted by staff of the Gallaudet Research Institute and researchers from other institutions; (2) evaluations of precollege students, programs, and personnel to determine their effectiveness; and (3) dissemination of such research and evaluation results to professionals in the field of deaf education. Results are disseminated through professional journals, Gallaudet publications, and Gallaudet staff presentations at conferences and workshops. Research topics include communication in the classroom, social and emotional development of deaf children, and development of a computerized information base on students. KDES and MSSD students often serve as subjects in the research projects.

We were unable to compare KDES' costs with those of other schools for the deaf because comparable financial data on day schools for the deaf were not available.

CHAPTER 4

MODEL SECONDARY SCHOOL FOR THE DEAF

MSSD was authorized to be established by Public Law 89-694, enacted on October 15, 1966, to provide

" . . . day and residential facilities for secondary education for persons who are deaf in order to prepare them for college and other advanced study, and to provide an exemplary secondary school program to stimulate the development of similarly excellent programs throughout the Nation. . . ."

A May 16, 1969, agreement between the Secretary of the Department of Health, Education, and Welfare (the predecessor to ED) and Gallaudet College authorized the establishment and operation of MSSD to serve students residing in [the school's primary service area (PSA) which includes] the District of Columbia, Virginia, West Virginia, Maryland, Pennsylvania, and Delaware.

OBJECTIVES

The agreement further states that MSSD will prepare students

- for various types of postsecondary education;
- to use or develop potential skills for technical, vocational, and trade pursuits if they do not go to college; and
- to be independent and contributing members of society at their respective levels of functioning upon completion of the program.

In addition, the agreement calls for MSSD to develop courses of such excellence that they may be modeled at other schools.

In accordance with the law and the agreement between Gallaudet College and the former HEW, MSSD's objectives are to

- prepare students for postsecondary education and careers,
- disseminate information on the teaching of deaf students to other programs and schools, and
- tailor instruction to meet individual student needs.

According to the dean of MSSD, the school attempts to meet these objectives through a philosophy which emphasizes (1) "total communication" (see p. 44) and (2) individualized student instruction based on achievement and communication skills. Each student at MSSD has an IEP (see p. 45) which identifies annual goals and short-term instructional objectives. The IEP is developed by an MSSD staff member in consultation with the student and his or her parents.

MSSD began operations in 1970 with an entering class of nine students. As of fall 1984, MSSD had an enrollment of 353.

ACADEMIC PROGRAMS AND ACCREDITATION

MSSD offers required courses in English, career development, communication, mathematics, science, social studies, business education, and physical education, as well as elective courses in art, foreign languages, home economics, industrial education, and performing arts. In addition, new MSSD students are required to take an orientation course to acquaint them with MSSD's programs, services, and personnel and otherwise assist them in adjusting to the school environment.

All programs at MSSD are accredited by MSA, Commission on Secondary Schools, and the Conference of Educational Administrators Serving the Deaf.

REVENUES AND EXPENDITURES

MSSD is funded almost exclusively with federal funds. Less than 1 percent of its revenues comes from other sources, such as income from vending machines. In 1971, the first full year of operation, MSSD received federal funds of \$2.2 million. In 1983 and 1984, MSSD received \$11.7 million and \$12.2 million, respectively, in federal funds. MSSD students do not pay tuition and receive free room and board. In fiscal year 1984, MSSD spent 56 percent (\$6.8 million) of its total expenditures (\$12.2 million) for direct education and 44 percent (\$5.4 million) for research and demonstration (see p. 57 for a discussion of MSSD's research and demonstration activities).

Gallaudet College's vice-president for Pre-college Programs is the administrative head of MSSD. He is assisted by the MSSD dean, principal, and director of Student Life.

WHO THE INSTITUTION SERVES

Public Law 89-694 authorizes MSSD to serve persons who are deaf and who primarily reside in the District of Columbia and nearby states. MSSD's mission is to prepare them for post-secondary education or other pursuits.

Admission criteria

MSSD has six basic admission criteria related to educational background, hearing loss, academic achievement, residency, degree of secondary handicap(s), and age, as required by the agreement between ED and Gallaudet College governing MSSD. To be considered for admission, applicants must

- demonstrate completion or near completion of an eighth grade education or its equivalent;
- demonstrate a hearing loss of 70 db or greater in the better ear;
- demonstrate a third grade reading level or higher on the SAT-HI--in addition, applicants' scores in arithmetic, social studies, and science should be higher than the required reading score;
- reside with a parent or legal guardian in the United States--primary consideration is given to applicants who reside in the PSA (see p. 58);
- have no major secondary handicaps that would limit their ability to profit educationally from MSSD; and
- be between the ages of 14 and 19 by December 31 of the enrollment year for which they are applying.

In addition to these six criteria, applicants are required to demonstrate personal and social maturity.

Applicant selection procedures

Admissions decisions are made by the admissions committee, consisting of the MSSD dean, admissions officer, and intake coordinator, with input from the clinical support services staff and special services specialist. Preliminary determinations of eligibility are made by the dean and admissions officer.

Completed application packages must be submitted by April 15 for consideration for September enrollment. Each application package includes:

- An application form.
- An audiogram.
- Personal references regarding the applicant's emotional and social maturity.

--Any psychological or sociological evaluations of the applicant completed within the previous 2 years.

--Current academic information, such as the applicant's IEP, school transcripts, and SAT-HI results.

The application package is reviewed by the dean and the admissions officer who make a preliminary determination of eligibility based upon the admission criteria.

Prior to a final decision of acceptance, applicants receiving preliminary clearance participate in 2 days of tests, evaluations, and interviews. At this time, MSSD staff conduct audiological and sign language evaluations and administer standardized and MSSD-developed tests in science, social studies, math, written language, reading, and logical relationships. The SAT-HI is given to applicants who have not taken the test because their schools do not administer it or a comparable exam. In addition, if requested by the admissions committee, the clinical and support services staff, which includes psychologists and counselors, evaluate candidates' mental ability and emotional maturity. Also, the special services specialist evaluates multihandicapped applicants having a possible need for special services. Information obtained from the evaluations and interviews is used by the admissions committee to decide for each applicant whether to accept, reject, or accept on a trial basis. (The information is also later used to assist academic advisors in students' class and program placement and to screen for possible special learning requirements or needs that may require additional programming or services.)

Primary consideration for admission is given to applicants residing in the PSA, including those who have completed KDES. Secondary consideration is given to applicants from states where similar programs for the deaf are not available.

We did a limited review of accepted and rejected MSSD applicants to see if there were any apparent violations of admissions criteria. We reviewed files of 20 of the 410 students enrolled in school year 1983-84. Of the 20, 7 had been accepted on a trial basis, including 2 who were emotionally and socially immature and 4 with low achievement scores. In the remaining case, we were unable to determine why the applicant was accepted on a trial basis. In one of the seven cases, we were unable to determine whether the student had the required hearing loss because the file did not contain the student's audiogram. In addition, three of the four students with low achievement scores had been initially rejected for admission, but were accepted on a trial basis after an appeal by their parents and/or school systems.

Regarding the 13 students who had been accepted on a regular--rather than trial--basis, 4 appeared to have met the admission criteria. We were unable to determine whether eight students had the required hearing loss because audiograms were missing from their files, and whether one student had the required third grade reading level because the student's test scores were missing from the file.

Our review of files of 16 of 44 rejected applicants for school year 1983-84 indicated that the rejected applicants did not meet one or more of the admission criteria.

Student enrollment and capacity

The agreement between Gallaudet and the former HEW governing MSSD prescribed a student enrollment of about 600 for MSSD. The enrollment capacity was later renegotiated to 500, according to MSSD officials. However, MSSD officials annually determine enrollment capacity based upon MSSD's budget and available bed space and staff. Enrollment capacity for school year 1984-85 is 450, including 375 residential and 75 day students. The following table shows MSSD's enrollment and enrollment capacity for school years 1980-81 through 1984-85.

<u>Year</u>	<u>Number of enrolled students</u>	<u>Enrollment capacity</u>
1980-81	408	410
1981-82	412	425
1982-83	426	425
1983-84	410	425
1984-85	353	450

According to MSSD officials, enrollment for school year 1984-85 is below capacity because of the lack of qualified applicants from the PSA. We found that about half of the 1984-85 student body resides in the PSA. In addition, officials said that many parents do not want to send their children to school away from home or pay children's transportation costs. Lastly, officials said that enrollment for school year 1983-84 was below capacity because MSSD did not have a formal recruitment plan. Officials said that MSSD is currently developing a recruitment plan.

Recruitment efforts

According to MSSD officials, historically MSSD has conducted recruiting activities, primarily consisting of disseminating information to the public. For example, in the 1983-84 school year, although MSSD did not have a formal recruitment plan, MSSD's recruitment activities included:

- Disseminating information to and meeting with parents of students enrolled in MSSD who volunteer to talk to the parents of prospective applicants.
- Publishing information about MSSD students and programs in Gallaudet College and other publications, and in students' hometown newspapers.
- Coordinating with the Gallaudet Visitors Center to ensure that visitors to MSSD, particularly parents of the deaf, receive a guided tour and answers to their questions.
- Exhibiting information at national meetings of educators, vocational rehabilitation personnel, guidance counselors, and parents of the deaf. For example, MSSD has disseminated information about its program at national meetings of the American Personnel and Guidance Association, the Council for Exceptional Children, National Parent-Teachers Association, and the National Education Association.
- Advertising in the New York Times education supplement and other publications.

Student characteristics

In the fall of 1984, 353 students were enrolled at MSSD, of which 116 were in the entering class. MSSD received 196 applications for admission for the fall of 1984. MSSD accepted 134 (68 percent), including 4 on a trial basis and rejected 52 (27 percent). Ten (5 percent) withdrew their applications. Of the 134 accepted applicants, 116 (87 percent) enrolled. The following table shows the characteristics of the fall 1984 student body.

Table 11

MSSD Fall 1984 Student Body Characteristics

<u>Student characteristic</u>	<u>Total number of students</u>	<u>Percent of total students</u>
Sex:		
Male	205	58.1
Female	<u>148</u>	<u>41.9</u>
Total	<u>353</u>	<u>100.0</u>
Ethnic origin:		
White	249	70.5
Black	74	21.0
Hispanic	17	4.8
Oriental	5	1.4
Other minorities	<u>8</u>	<u>2.3</u>
Total	<u>353</u>	<u>100.0</u>
Geographic distribution:		
PSA	177	50.1
Outside primary service area	<u>176</u>	<u>49.9</u>
Total	<u>353</u>	<u>100.0</u>
Age group:		
13	5	1.4
14-16	147	41.7
17-19	159	45.0
20-21	<u>42</u>	<u>11.9</u>
Total	<u>353</u>	<u>100.0</u>

Of the 353 students enrolled in MSSD in the fall of 1984, 58 percent were male, 42 percent were female, 71 percent were white, 21 percent were black, and 87 percent were between the ages of 14 and 19. In addition, half the students resided in the PSA. Of the 353 students, those residing in the PSA included 20 percent from Pennsylvania, 11 percent each from Virginia and Maryland, 6 percent from the District of Columbia, and less than 1 percent each from West Virginia and Delaware. Of the 353 students, those residing outside the PSA included

7 percent from Georgia, 6 percent from Massachusetts, and 5 percent each from Ohio, New York, and New Jersey. Data were not available on the fall 1984 student body for hearing loss or prior schools attended.

The following table shows the characteristics of the fall 1984 entering students.

Table 12

MSSD Fall 1984 Entering Students' Characteristics

<u>Student characteristic</u>	<u>Total number of entering students</u>	<u>Percent of total entering students</u>
Sex:		
Male	63	54.3
Female	53	45.7
Total	116	100.0
Degree of hearing loss:		
0-25 db	1	.9
26-40 db	-	-
41-55 db	-	-
56-70 db	7	6.0
71-90 db	39	33.6
91 db or greater	69	59.5
Total	116	100.0
Ethnic origin:		
White	90	77.5
Black	16	13.8
Hispanic	8	6.9
Oriental	1	.9
Other minorities	1	.9
Total	116	100.0
Prior school attended:		
Residential school for the deaf	64	55.2
Public school with mainstream- ing program	52	44.8
Total	116	100.0
Geographic distribution:		
PSA	56	48.3
Outside primary service area	60	51.7
Total	116	100.0
Age group:		
13	5	4.3
14-16	83	71.6
17-19	28	24.1
20-21	-	-
Total	116	100.0

Of the 116 entering students for the fall of 1984, 54 percent were male, 46 percent were female, 78 percent were white, 14 percent were black, and 72 percent were between the ages of 14 and 16. In addition, 93 percent of the entering students had a severe hearing loss of at least 71 db and 60 percent had a profound hearing loss of 91 db or more. Lastly, of the 116 entering students, 48 percent resided in the PSA, with 28 percent from Pennsylvania.

TYPES AND COSTS OF SERVICES

According to the agreement between Gallaudet College and HEW for the operation of MSSD, MSSD or the college shall provide students with free services, including medical, audiological, psychological and psychiatric, counseling, and employment services. In accordance with the agreement, MSSD provides the following educational and support services:

- Developmental assessment.
- Counseling.
- Communications.
- Outreach.
- Academic advising.
- Special services for the multihandicapped.

As the table below indicates, in fiscal year 1984, these services, as well as MSSD's residence program, were budgeted for \$2.4 million, representing 21 percent of MSSD's total fiscal year budget of \$11.7 million.

Table 13

Budgeted Costs of MSSD Support Services
(Fiscal Year 1984)

<u>Type of service</u>	<u>Amount of budget</u>	<u>Percent of total budget</u>	<u>Number of full-time professional staff</u>
Residence program	\$1,028,897	8.8	52
Clinical and support services	422,228	3.6	12
Communications	358,538	3.1	14
Outreach	340,352	2.9	11 ^a
Educational planning	247,162	2.1	10
Student special services	<u>34,416</u>	<u>.3</u>	<u>1</u>
Total	<u>\$2,431,593</u>	<u>20.8</u>	<u>100</u>

^aOutreach staff serve both KDES and MSSD.

Residence program

For fiscal year 1984, the residence program's budget was \$1,028,897 or 8.8 percent of MSSD's total budget. MSSD estimated 90 percent of the costs for the residence program to be student related and 10 percent to be nonstudent related.

In fiscal year 1984, 410 MSSD students resided in MSSD's six dormitories. In addition to providing student housing, the residence program provides extracurricular activities to (1) enhance students' self-direction, interaction, and motivation; (2) emphasize sensitivity to and compassion for others; and (3) develop student skills in group living, problem solving, and coping. The program also provides and disseminates model program activities for replication in other residence programs for the deaf.

During fiscal year 1984, the residence program provided services to the 410 students and their families, 302 visitors, and 30 visiting athletic teams. The residence program consisted of 52 full-time professional staff, including the program supervisor, resident advisors, resident assistants, night supervisors, and interpreters.

Clinical and support services

For fiscal year 1984, the clinical and support services' budget was \$422,228 or 3.6 percent of MSSD's total budget. MSSD estimated the budget for these services to be 75 percent student related and 25 percent nonstudent related.

Clinical and support activities are provided to assist students in meeting with success in school and with postsecondary or career planning. Clinical and support services include (1) assessment of students' developmental needs, (2) individual and group counseling, and (3) student orientation regarding the availability of MSSD services.

During fiscal year 1984, clinical and support services were provided to an estimated 400 students a month and to 568 non-students. Services to nonstudents included (1) regular contacts with family members, community agencies, postsecondary institutions, consultants, foster care sites, and visitors from other educational programs; (2) workshop presentations; and (3) supervision of practicum and intern students. The clinical and support services' staff consisted of a 12-member multidisciplinary team including counselors, psychologists, social workers, and a nurse. The team also included a psychologist intern and an art therapist, both of whom were temporary part-time employees.

Communications

The fiscal year 1984 budget for the communications department was \$358,538 or 3.1 percent of MSSD's total budget. MSSD estimated the student related activities to be 80 percent of the department's budget.

The communications department teaches communication skills, history of sign language, and education of the deaf. Department staff also help develop students' communication skills through speech therapy, auditory training, and music elements and appreciation.

During fiscal year 1984, the department provided services to at least 400 students and about 500 nonstudents, including families, outside professionals, and other visitors. The department consisted of 14 professional staff, including audiologists, speech pathologists, communication specialists, and an audio system engineer.

Outreach

The fiscal year 1984 budget for MSSD's outreach services was \$340,352 or 2.9 percent of its total budget. MSSD estimated the budget for outreach services to be 100 percent nonstudent related.

In keeping with the missions of MSSD and KDES to develop and disseminate exemplary education programs, MSSD's and KDES' joint outreach services include disseminating course materials; developing workshops; serving as a practicum site for training graduate students; and conducting presentations at professional and in-service meetings.

MSSD and KDES estimated that during fiscal year 1984, 19,705 educational products were distributed to the public. The outreach staff which jointly serve MSSD and KDES consisted of 11 full-time professionals, including supervisors for product distribution, circulation, and professional assistance; editors; specialists; a marketing coordinator; and an editorial assistant.

Educational planning office

The fiscal year 1984 budget for the Educational Planning Office was \$247,162, or 2.1 percent of MSSD's total budget. MSSD estimated the Planning Office budget to be 80 percent student related and 20 percent nonstudent related.

The Educational Planning Office is the academic advising unit for MSSD students. The academic advisors are responsible for working with students and parents to develop each student's IEP. The advisors also counsel students on academic related matters. In addition, the Office staff teach an orientation course for new students.

During fiscal year 1984, the Office provided services to all 410 enrolled students and 800 nonstudents, including families, state and local education agencies, and visitors. The staff included three planning specialists, six planning aides, and one scheduler.

Student special services

In fiscal year 1984, the student special services' budget of \$34,416 supported one full-time staff member who provided services to about 200 students and 70 nonstudents. Nonstudents included specialists in deaf education or special education and visitors. MSSD estimated about 75 percent of the cost to be student related and the remaining 25 percent to be nonstudent related.

The special services unit, located within the Office of the Principal, provides special aids and equipment for MSSD students who have one or more disabilities in addition to deafness. The unit also designs, coordinates, and provides in-service training activities for the MSSD community, including faculty, staff, parents, and other professionals.

GRADUATION AND FURTHER SCHOOLING

MSSD awards diplomas to students who successfully complete the requirements for graduation. Certificates of attendance are given to students who do not meet the minimum graduation requirements.

Graduation requirements

To obtain a diploma, MSSD students must successfully complete 44 curriculum units. Students are awarded curriculum units for completing courses in specific subject areas. Each curriculum unit represents 18 weeks, or one semester, of instruction. Students are required to complete 8 semesters of English (i.e., 8 curriculum units); 6 semesters each of mathematics and career development courses; 4 semesters each of communication, science, social studies, and physical education; 1 semester course on health; and 5 semesters of electives in three or more areas. MSSD does not have a letter grade system; instead it awards curriculum units to students who complete 80 percent of the course's objectives.

MSSD also awards a certificate of attendance. This certificate indicates that the student has participated in an individual course of study which does not meet the minimum requirements for the academic diploma.

Length of stay

According to the vice-president for Pre-College Programs, students enter MSSD at approximately age 15 and graduate at about age 19. He said that to his knowledge no student at the school has been older than 20. Students may not attend MSSD after their 21st birthday.

Characteristics of graduates

Of 140 students expected to graduate from MSSD in 1983-84, 129 (92.1 percent) graduated, with 124 (96 percent) receiving diplomas, and 5 (4 percent) receiving certificates of attendance. In 1983-84, 11 (7.9 percent) students who were expected to graduate did not. In 1982-83, 87.5 percent (126) of 144 students expected to graduate did so, with 91 percent (115)

receiving diplomas and 9 percent (11) receiving certificates. In 1982-83, 12.5 percent (18) did not graduate.

Post-MSSD experience

Of the 129 students who completed their work at MSSD in 1983-84, 116 (90 percent) applied to one or more postsecondary programs. As of June 1984, 98 (84 percent) had been accepted at one or more institutions. As of August 1984, applications were still pending for 13 students; while 5 students were not accepted by any institution.

Of 57 institutions receiving applications from MSSD 1984 graduates, Gallaudet College, NTID, and New River Community College (a school in Dublin, Virginia, with a program for the hearing impaired) received the most applications. Gallaudet College received 59 applications and accepted 41. (Those who were rejected failed Gallaudet's entrance exam.) NTID received 37 applications and accepted 30. New River Community College received applications from 33 students and accepted 29.

A 1984 survey conducted by the Office of the MSSD Dean showed that of the 13 (10 percent) students who did not apply to any postsecondary program, 8 said they would work and 5 were undecided. Information on student applications to colleges in 1982-83 was not available.

MSSD'S COSTS COMPARED WITH COSTS AT OTHER INSTITUTIONS

MSSD's cost per student for the 1981-82 school year was \$15,085 compared to the median cost per student of \$14,751 for 43 of the nation's 57 other state residential schools for the deaf,¹ based on the most recent available data from the American Annals of the Deaf. The cost per student at the 43 schools ranged from \$8,702 to \$28,694. Twenty of the comparison schools had higher costs than MSSD. The MSSD cost per student of \$15,085 excludes research and demonstration costs. According to the then executive director of the Conference of Educational Administrators Serving the Deaf, MSSD is the only public residential school for the deaf with mandated research and demonstration functions. Therefore, we analyzed MSSD's cost per student excluding these costs.

¹See pages 6, 7, and 9 for an explanation of the number of state residential schools for the deaf that we used in comparing MSSD's cost per student, student-faculty ratio, and faculty salaries as described below.

When MSSD's research and demonstration costs are included in its total costs, its cost per student rises to \$25,567--almost twice as high as the median cost per student for the comparison schools. In this case, only one comparison school had a higher cost per student (\$28,694) than MSSD. In school year 1981-82, MSSD's research and demonstration costs were \$4.5 million (41 percent) of its total expenditures of \$10.9 million.

The MSSD cost per student in school years 1981-82, 1982-83, and 1983-84, including research and demonstration costs, are shown in the table below.

<u>School year</u>	<u>Direct education cost per student</u>	<u>Research and demonstration cost per student</u>	<u>Total cost per student</u>
1981-82	\$15,085	\$10,482	\$25,567
1982-83	15,887	12,790	28,677
1983-84	16,475	13,281	29,756

STUDENT-FACULTY RATIO COMPARED WITH THE STUDENT-FACULTY RATIO AT OTHER INSTITUTIONS

Based upon the most recent available data from the American Annals of the Deaf, MSSD's 1982-83 student-faculty ratio of 5:1 was the same as the median student-faculty ratio for the comparison group of 44 state residential schools for the deaf. The Conference on Educational Administrators Serving the Deaf recommends a minimum student-faculty ratio of 4:1 and a maximum of 10:1 for high school classes for the deaf (excluding multihandicapped students). The student-faculty ratio (the ratio of students to teachers) is one factor contributing to a school's total costs.

The student-faculty ratio at the 43 state residential schools for the deaf in the comparison group ranged from 3:1 to 7:1. One-half of the schools in the comparison group had the same student-faculty ratio of 5:1 as MSSD.

FACULTY SALARIES COMPARED WITH SALARIES AT OTHER INSTITUTIONS

Following are the 1982-83 and 1983-84 salary levels established by MSSD for all MSSD teaching faculty and the number of faculty at each level. MSSD requires its teachers to have, at a minimum, a master's degree.

Table 14

Range in MSSD's Faculty Salaries

1982-83		1983-84	
<u>Salary ranges</u>	<u>Number</u>	<u>Salary ranges</u>	<u>Number</u>
\$16,603-\$22,862	32	\$16,769-\$23,090	24
22,863- 29,121	39	23,091- 29,412	36
29,122- 35,380	13	29,413- 35,733	20

Using the most recent available information from the American Annals of the Deaf, we determined that, for teachers with master's degrees, MSSD's 1982-83 median salary of \$19,500 was 8 percent higher than the median salary of \$18,105 for 38 state residential schools for the deaf. The table below shows MSSD's 1982-83 maximum and minimum salaries for faculty with master's degrees compared with the median maximum and minimum salaries for the comparison group.

Table 15

Comparison of MSSD's Faculty Salaries With Median Salaries at State Residential Schools For the Deaf (1982-83)

	<u>Minimum salary</u>	<u>Maximum salary</u>
MSSD	\$16,603	\$32,714
State residen- tial schools	14,900	22,179

MSSD's maximum salary for faculty holding master's degrees (\$32,714) was more than the highest maximum salary for 40 state residential schools for the deaf (\$29,171) and 44 percent higher than the median maximum salary (\$22,719). The lowest maximum salary was \$16,848.

MSSD's minimum salary for faculty with master's degrees (\$16,603) was 11 percent higher than the median minimum salary (\$14,900) for 39 state residential schools for the deaf. The highest minimum salary was \$19,668, and the lowest was \$11,000. Minimum salaries of six of the comparison schools were higher than MSSD's.

Based upon information obtained from MSSD and the District of Columbia's public schools for school year 1983-84, we compared MSSD's salary range for teaching faculty with master's degrees with the salary range for public school faculty with

master's degrees in MSSD's geographical area. MSSD's salary range was \$16,769 to \$33,043 compared with Washington, D.C.'s faculty salary range of \$18,886 to \$30,702. Thus, MSSD's minimum salary was 11 percent lower than Washington, D.C.'s minimum salary, and its maximum salary was 8 percent higher than Washington, D.C.'s.

CHAPTER 5

NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

The National Technical Institute for the Deaf was authorized to be established by the National Technical Institute for the Deaf Act (Public Law 89-36), enacted on June 8, 1965. The legislation's purpose was to provide "a residential facility for postsecondary technical training and education for persons who are deaf in order to prepare them for successful employment" The act was the result of congressional concern that deaf people were not employed in skilled jobs and lacked educational opportunities beyond high school. Until the act was passed in 1965, Gallaudet College was the only institution of higher education for the deaf in the world.

OBJECTIVES

Based upon the act, the goals and objectives developed by NTID are to:

- provide postsecondary deaf students with the opportunity to pursue semiprofessional and professional level technical education programs that lead to successful employment in business, education, government, and industry;
- provide special support services which help deaf students achieve a high degree of personal, social, and cultural development;
- encourage qualified deaf students to pursue graduate studies at RIT, or elsewhere;
- conduct and disseminate research on the occupational and the employment related aspects of deafness;
- develop, evaluate, and disseminate new instructional technology for use in educating deaf students; and
- conduct training programs relating to deafness for RIT personnel, graduate students preparing to work with the deaf, and others.

NTID began operations in 1968 with an entering class of 71. As of fall 1984, NTID had an enrollment of 1,319 deaf students, including 208 (16 percent) enrolled in degree programs in other colleges of RIT.

DEGREE PROGRAMS AND ACCREDITATION

Deaf students at NTID can earn certificates, diplomas, or an associate's degree (see pp. 94 and 95) by completing 1 of 37 NTID technical programs in one of three technical schools: business, visual communications, and engineering and science. In addition, hearing students may earn an associate's degree in interpreting for the hearing impaired. Of NTID's 37 technical programs, 8 lead to certificates, 14 lead to diplomas, and 15 lead to an associate's degree.

NTID students who indicate the desire and are considered qualified may also enroll in 1 of 132 other RIT degree programs, leading to an associate's, bachelor's, or master's degree. Of these 132 programs, 30 lead to an associate's degree, 54 lead to a bachelor's degree, and 48 lead to a master's degree.

RIT's nine colleges, including NTID, are accredited by MSA. In addition, of 15 NTID associate's degree programs, 5 are accredited by professional associations and 2 have applied for accreditation. According to an NTID official, the remainder of the NTID degree programs are not individually accredited because there are no professional associations which accredit them.

REVENUES AND EXPENDITURES

In fiscal years 1983 and 1984, NTID received \$26.3 million and \$28 million, respectively, in federal funds. In fiscal year 1983, the federal appropriation represented approximately 89 percent of NTID's total revenue of \$29.6 million, with the remainder obtained primarily from student tuition and fees. In school year 1983-84, NTID students were charged about \$4,280 for tuition, room, board, and other fees. Based upon guidelines set in 1968 by the former HEW, ED's predecessor department, tuition charges are based upon charges at land grant institutions.

NTID appropriations are based on the institution's annual budget request to ED which, in turn, is reviewed and approved by the Office of Management and Budget and the Congress. ED has oversight responsibility for NTID's budget.

The following table shows NTID's fiscal year 1983 educational and general expenditures of \$26.8 million. An additional \$2.7 million was spent for auxiliary enterprises, making NTID's fiscal year 1983 total expenditures \$29.6 million. The educational and general expenditure categories noted below are the same as those used by Gallaudet College and are defined by ED, (see app. II) for use by all postsecondary institutions which annually report expenditure data to ED.

Expenditure categoryAmount

(000 omitted)

Instruction	\$ 8,917.2
Academic support	6,095.7
Student services	4,082.8
Institutional support	3,802.0
Operations and maintenance	1,670.2
Public service	1,107.0
Research	998.3
Scholarships and fellowships	<u>150.0</u>
Total	<u>\$26,823.2</u>

In fiscal year 1983, NTID spent about 56 percent of its total educational and general expenditures of \$26.8 million on instruction (\$8.9 million) and academic support services (\$6.1 million). Instruction expenditures were comprised primarily of faculty salaries in the technical and general education programs and support teams which assist NTID students enrolled in other RIT classes with "hearing" students (see p. 89). Academic support expenditures included, for example, costs for interpreting, student notetaking, media design and production, and faculty development. The remaining educational and general expenditures were for student services (\$4.1 million), institutional support (\$3.8 million), operations and maintenance (\$1.7 million), public service (\$1.1 million), research (\$1.0 million), and scholarships and fellowships (\$.2 million).

See pages 100 to 105 for a comparison of NTID's costs with costs at other institutions.

RIT/NTID RELATIONSHIP

RIT serves as NTID's sponsoring institution in accordance with the National Technical Institute for the Deaf Act which authorized the Secretary of the former HEW to enter into an agreement with an institution of higher education to establish, construct, and operate a National Technical Institute for the Deaf. Both the Senate and House reports accompanying the legislation stated that

"[t]he Institute should be affiliated with a major university for the administration of its program. This would facilitate securing the medical, audiological, psychological, and psychiatric services needed to supplement appropriate guidance and counseling services provided by the staff of the Institute."

RIT was 1 of more than 40 higher education institutions which submitted a proposal to HEW to serve as NTID's sponsoring institution.

The agreement between the Secretary of HEW and RIT for the establishment and operation of NTID was reached on December 20, 1966. Subsequent responsibility for the agreement was transferred from the former HEW to ED in 1980. The agreement between ED and RIT describes a set of operating procedures governing the establishment, construction, and operation of NTID. The agreement incorporated the Policies, Guidelines and Application Procedures which HEW developed as guidance for potential NTID sponsors. The agreement covers the sponsor's organization and qualifications, budget requests and reporting requirements, maintenance and examination of records, and payments and refunds of federal funds.

RIT is reimbursed by the federal government for NTID expenses through letter-of-credit drawdowns, which allow RIT to obtain payments from a Federal Reserve Bank through its local commercial bank. RIT makes six drawdowns per month to coincide with its four weekly paydays and two semimonthly paydays. According to RIT officials, drawdowns are for reimbursement of NTID expenses already incurred by RIT.

Administrative relationship

RIT considers NTID to be one of its nine colleges. Thus, general administrative policies, such as the hiring and payment of faculty and the obtaining and payment of vendor services, are the same. However, in administering NTID, the agreement between RIT and ED requires RIT to maintain separate accounts for all NTID revenues and expenditures. As a result, costs, such as overhead, student health services, and dormitory costs, are charged directly to NTID.

RIT's vice president for Government Relations serves as the director of NTID. In addition to directing NTID, since school year 1982-83 he has assisted in setting RIT policy in matters relating to organizational structure, administration, academics, and new program development. Since that time, NTID has paid 75 percent of the director's salary; the other 25 percent is paid by RIT. Prior to that time, the director's salary was paid entirely by NTID.

According to an NTID official, NTID reimburses RIT for charges associated with NTID students attending classes in other RIT colleges. Charges are based on the number of RIT course credit hours taken by NTID students. Charges differ for each college. For example, in fiscal year 1984, per credit hour

charges ranged from \$70 in the College of Liberal Arts to \$188 in the College of Graphic Arts and Applied Photography. In that year NTID was charged a total of \$1.1 million for 10,930 credit hours taken by NTID students in other RIT colleges (3,188 instances).

NTID faculty may also teach courses in other RIT colleges and continue to be paid by NTID if the purpose is (1) to teach deaf students attending RIT or (2) for faculty development. However, if an NTID faculty member teaches at RIT's request, RIT pays a portion of the salary. During fiscal year 1984, NTID faculty taught 176 hours of RIT classes attended by deaf students, 28 hours of classes at the request of RIT, and 2 hours for faculty development.

NTID and RIT staff share office space and the schools reimburse each other, accordingly. For example, as of fall 1984, NTID staff occupied 65 offices and 14 other spaces, such as labs or special study areas, in various RIT buildings, totaling 15,014 net square feet. NTID planned to reimburse RIT an estimated \$120,000 for use of these offices in fiscal year 1984. According to an NTID official, most of the 65 offices were used by NTID "support team" staff who provide educational support services to NTID students enrolled in RIT academic programs. The support team offices are located in the various RIT colleges to which NTID students have transferred. As of fall 1984, RIT staff occupied five offices in one of two NTID academic buildings, totaling 440 net square feet. RIT planned to reimburse NTID an estimated \$4,000 for use of these offices in fiscal year 1984.

NTID and RIT share classroom space at no cost to each other. During the 1983-84 school year, RIT faculty taught 388 hours of classes in NTID classrooms, and NTID faculty taught 303 hours of classes in RIT classrooms. According to the assistant to the director of NTID, these exchanges are made at no inconvenience to the respective colleges involved and therefore no charge is assessed for use of these classrooms. RIT uses NTID classrooms primarily in the evening when NTID does not hold classes. NTID uses RIT classrooms and labs for late afternoon classes to utilize available RIT space which NTID does not have.

RIT has an internal audit group which performs periodic reviews of various aspects of NTID operations. For example, RIT has audited NTID's property control, student health services, and cash controls in the hearing aid shop. During 1985, the RIT audit group plans to review the operations of the NTID Finance Office, and the Office of Systems and Planning, and Career Planning and Placement.

NTID student transfers to RIT

According to NTID officials, NTID encourages students, who demonstrate the capability, to continue their education at RIT to obtain bachelor's and master's degrees. Although Public Law 89-36 did not address the issue specifically, both the Senate and House reports accompanying it stated that "[a]n enrichment curriculum should be made available to those students who have the ability and desire to pursue further professional training in other institutions of higher learning." This goal was incorporated into Policies, Guidelines and Application Procedures which states that NTID is to provide the opportunity for continuing higher education for students who qualify. This goal was also supported by a 1972 HEW General Counsel Decision, which stated that NTID may provide its students with opportunities to obtain bachelor degrees.

According to the NTID director, students are able to transfer into RIT degree programs based upon NTID sponsorship and are not required to meet standard RIT admission criteria. However, some RIT programs, such as the Bachelor of Technology degree programs offered by the RIT College of Applied Science and Technology, require NTID students to have an associate's degree, or the equivalent number of credits in a related course of study, in order to be admitted. NTID provides support services, such as interpreting, notetaking, and tutoring, to NTID students who transfer to RIT degree programs.

Between 1970 and 1984, 398 NTID students (21 percent of 1,866 total NTID graduates) graduated from RIT programs. The following table shows the number and percentage of NTID students who graduated from RIT programs in each year from 1975 to 1984.

Table 16

Number of NTID Graduates of RIT Programs
(1975-1984)

<u>Year</u>	Total number of deaf students graduating from NTID or other RIT colleges	<u>Number and percent of deaf students graduating from other RIT colleges</u>	
		<u>Number</u>	<u>Percent</u>
1975	105	24	22.9
1976	103	13	12.6
1977	121	22	18.2
1978	164	35	21.3
1979	171	30	17.5
1980	167	37	22.2
1981	185	40	21.6
1982	197	34	17.3
1983	177	39	22.0
1984	199	45	22.6

In 1971 HEW auditors reviewed RIT's administration of NTID and concluded that there was an overemphasis on NTID students enrolling in RIT degree programs. According to HEW, approximately 39 percent of NTID students were enrolled in RIT degree programs between the 1968 fall quarter and the 1971 spring quarter. RIT disagreed with HEW's conclusion, claiming that approximately 6 percent of NTID students were enrolled in baccalaureate degree programs during this period. The difference of opinion was the result of how each defined NTID student enrollment in RIT.

The issue was referred to HEW's General Counsel, and in 1972 HEW determined that NTID (1) may provide its students with opportunities to obtain baccalaureate degrees, (2) could not refuse admission to a student who could not qualify for courses leading to a baccalaureate degree, and (3) must judge each applicant solely on an evaluation of potential for successfully completing a course of study which would provide an employable skill. As a result of this decision, RIT has continued to allow NTID students to pursue RIT degrees.

WHO THE INSTITUTION SERVES

The Policies, Guidelines and Application Procedures state that NTID should serve students who . . . "range from those who are at the eighth grade or beyond to those who are unqualified candidates for admission to institutions of higher education."

The guidelines further state that "an individual will be selected for admission solely on the basis of ability to benefit from the instruction and without regard to factors immaterial to this consideration such as: sex, race, religion, creed, color, national origin, place of residence."

Admissions criteria

NTID has five basic admissions criteria related to academic achievement, degree of hearing loss, residency status, need for support services, and social and emotional maturity. To be admitted, applicants must:

- Demonstrate an overall eighth grade achievement level as measured by the Stanford Achievement Test or a comparable test. The Stanford Achievement Test measures a student's reading, language, and math capabilities. Applicants can be accepted with a seventh grade achievement level test score if approved by an NTID Admissions Review Board.
- Demonstrate an average hearing loss in their better ear of 70 db or greater. Applicants can be accepted with a 60-69 db average hearing loss in their better ear if approved by an NTID Admissions Review Board.
- Be citizens or permanent residents of the United States.
- Demonstrate a need for support services, such as having attended special schools or classes for the deaf.
- Demonstrate social and emotional maturity.

Applicant selection procedures

Admissions decisions are made by the Admissions Review Board, consisting of the NTID coordinator of admissions, four NTID faculty members, and three career opportunity advisors. The Admissions Review Board bases its admissions decisions upon a review of each applicant's completed application package which contains

- a completed application form,
- a high school transcript,
- achievement test scores,
- an audiological record, and
- personal references.

NTID has a rolling admissions policy whereby completed applications for the upcoming school year are considered and admissions decisions are made throughout the current academic year. In other words, qualified applicants are accepted on a first-come, first-served basis. A waiting list is established when there are more qualified applicants than anticipated openings, and these students are guaranteed admission for the following school year. For example, as of February 1985, there were 37 students on a waiting list for the fall 1985 quarter. According to NTID officials, this was the first year in which NTID had a waiting list after the start of the fall quarter.

Completed application packages are reviewed by an NTID admissions official--career opportunity advisor--and the NTID Admissions Review Board. The career opportunity advisor records pertinent student data on an applicant screening form and sends the completed file to the Admissions Review Board with a recommendation to accept, reject, or review the applications. The Admissions Review Board determines if an applicant will be accepted or rejected.

Applicants meeting all necessary criteria are usually accepted based on the recommendation of the career opportunity advisor who initially reviewed the applications. Applications not meeting all the necessary admissions criteria are further reviewed by the Admissions Review Board using NTID established procedures. For example, applicants having overall achievement test scores between 7.0 and 7.9 (a seventh grade achievement level) out of a possible 12.9 may be admitted by the Admissions Review Board if math subtest achievement scores are 8.0 or greater and references and high school records are considered "good to excellent." Applicants with a 60-69 db average hearing loss in the better ear may be admitted by the Admissions Review Board if scores on a "speech discrimination" (ability to understand spoken words) test are 50 percent or less.

We performed a limited review of fall 1984 accepted and rejected NTID applications to see if NTID followed its admissions procedures. Our review of 21 of 426 accepted applications indicated that one applicant was accepted with a hearing loss of less than 70 db because, according to the NTID coordinator of admissions, the applicant had been in schools for the deaf his entire life, thereby demonstrating a need for support services. In addition, five applicants were accepted with total achievement test scores between 7.0 and 7.9 because their references and high school records were considered "good to excellent" and their math achievement subtest scores were 8.0 or greater.

Our review of 20 of 186 rejected applications indicated that 2 applicants with acceptable audiological and achievement scores were rejected because one was legally blind and would require exceptional support services beyond NTID's capacity to provide them, and one had a history of drug abuse and a poor high school record.

Student enrollment and capacity

NTID's enrollment in the fall quarter of the 1984-85 school year was 1,319 deaf students, including residential and commuter students. The table below shows NTID's fall quarter enrollment in school years 1974-1984 for deaf students and "hearing" students enrolled in the interpreter training program.

Fall student enrollment

<u>School year</u>	<u>Deaf students</u>	<u>Hearing students</u>
1974	564	-
1975	647	-
1976	723	-
1977	799	-
1978	851	-
1979	922	-
1980	939	13
1981	964	44
1982	989	59
1983	1260	61
1984	1319	59

In 1983, NTID completed construction of a 30,000-square-foot classroom building, which was built to accommodate the expected increase in students from the "rubella bulge."¹ As a result of the additional classroom space, NTID's capacity for deaf students increased from 1,000 to 1,250 students. According to NTID officials, NTID does not have the academic or dormitory space to increase enrollment capacity beyond its current enrollment.

¹The "rubella bulge" is the result of a rubella measles epidemic in the early 1960's which caused a significant increase in the number of babies born deaf. These deaf people are now of post-secondary age.

NTID's three dormitories accommodate 800 students. NTID's other students live in RIT dorms, an RIT apartment complex adjacent to the campus, or off-campus. According to the assistant to the director of NTID, NTID prefers students to live in campus dormitories rather than off-campus because of the benefits students derive from programmed activities in dormitories. He also stated that NTID's "academic space" has been "squeezed" to the limit.

Recruitment efforts

NTID guidelines state that NTID should provide an efficient and effective recruitment program by establishing working relationships with (1) public and private schools for the deaf; (2) state departments of education or public instruction; (3) state vocational rehabilitation services; (4) public and private day schools having classes and other services for deaf children; (5) rehabilitation facilities offering services for the deaf; and (6) other interested groups, organizations, or individuals likely to have contact with the deaf.

In this regard, NTID employs four full-time recruiters and one part-time recruiter. (They are called career opportunity advisors.) They conduct outreach activities in all 50 states, which may include school visits and contacts with special education personnel and vocational rehabilitation personnel. In addition, they are involved in developing and presenting workshops to students, teachers, and parents highlighting NTID's educational opportunities, admissions criteria, types of students who can expect to successfully complete NTID programs, and the NTID short-term admissions outlook.

NTID's estimated recruitment expenditures in fiscal year 1984 were \$100,675. These expenditures included personnel costs, fringe benefits, travel, and miscellaneous costs, such as supplies and recruitment bulletins.

Of the fall 1983 entering class of 594, 31 percent came from schools for the deaf, 46 percent from public high schools, and 23 percent transferred from other postsecondary institutions. NTID plans to attract more students from schools for the deaf by providing literature to acquaint students with the opportunities available at NTID. NTID officials believe that since passage of legislation permitting all handicapped students to receive a free and appropriate public school education, there has been an increase in the number of public schools with special classes for the deaf and a resulting increase in the number of applications to NTID from students attending these schools.

According to an NTID admissions official, NTID attempts to assure representativeness regarding ethnic origin, sex, geography, and other characteristics through recruiting strategies, rather than through admissions policies. For example, each year NTID recruiters visit schools in areas where there are large minority populations, such as Chicago and New York, to provide information regarding opportunities available at NTID.

Student characteristics

There were 1,260 deaf students enrolled at NTID in the fall of 1983, of which 594 were in the entering class. NTID received 1,027 applications for admission for the fall of 1983. NTID accepted 759 (74 percent) and rejected 268 (26 percent). Of the 759 accepted applicants, 594 (78 percent) registered for the fall quarter of 1983.

The following table describes various student characteristics of the 1,260 NTID deaf students registered in the fall of 1983.

Table 17
NTID Fall 1983 Deaf Student Body Characteristics

<u>Student characteristic</u>	<u>Number of students</u>	<u>Percent of total students</u>
Sex:		
Male	731	58.0
Female	529	42.0
Total	1,260	100.0
Average hearing loss:		
92 db		
Onset of deafness:		
Less than 1 year old	1,096	87.0
One to 3 years old	126	10.0
Over 3 years old	38	3.0
Total	1,260	100.0
Ethnic origin:		
White	1,197	95.0
Black	24	1.9
Hispanic	18	1.4
Oriental	16	1.3
American Indian	5	0.4
Total	1,260	100.0
Prior high school:		
Public school ^a	680	54.0
Public school for deaf	542	43.0
Private school for deaf	38	3.0
Total	1,260	100.0
Geographic distribution:		
Northeast	605	48.0
North central	315	25.0
South	201	16.0
West	139	11.0
Total	1,260	100.0

^aPublic high schools include those in which deaf students attend special classes for the deaf and those in which deaf students attend regular classes with hearing students.

Of the 1,260 students enrolled at NTID in fall 1983, 58 percent (731) were male and 42 percent (529) were female. Students had an average hearing loss of 92 db, with 87 percent of them losing their hearing before 1 year of age. Of the 1,260 students, 95 percent were white, and 5 percent were minorities, including 24 (2 percent) blacks. Fifty-four percent of the 1,260 students had attended public schools with hearing students, while 46 percent had attended public or private schools for the deaf. Seventy-three percent of the students represented the northeast or north central part of the nation, with 605 (48 percent) from the northeast.

The following table describes various student characteristics for the 594 entering NTID students in the fall of 1983.

Table 18
NTID Fall 1983 Entering Class Characteristics

<u>Student characteristic</u>	<u>Number of entering students</u>	<u>Percent of total entering students</u>
Sex:		
Male	315	53.0
Female	279	47.0
Total	594	100.0
Average hearing loss:		
50-59 db	3	0.5
60-69 db	28	4.7
70-79 db	81	13.6
80-89 db	106	17.9
90-100 db	183	30.8
Over 100 db	167	28.1
Unavailable	26	4.4
Total	594	100.0
Onset of deafness:		
Less than 1 year old	491	83.0
1 to 3 years old	89	15.0
Over 3 years old	12	2.0
Total	594	100.0
Ethnic origin:		
White	507	85.4
Black	24	4.0
Hispanic	13	2.2
Oriental	9	1.5
American Indian	2	0.3
Unavailable	39	6.6
Total	594	100.0
Prior school attended:		
Public high schools ^a	273	46.0
Schools for the deaf	185	31.1
Other college	136	22.9
Total	594	100.0
Geographic distribution:		
Northeast	303	51.0
North central	146	24.6
South	101	17.0
West	44	7.4
Total	594	100.0

^aPublic schools include those in which deaf students attend special classes for the deaf and those in which deaf students attend regular classes with hearing students.

Of the 594 entering students in the fall of 1983, 315 (53 percent) were male and 279 (47 percent) were female. Ninety percent or more of the entering students had at least a severe hearing loss of 70 db and at least 59 percent had a profound hearing loss of 90 db or more. Eighty-three percent of the students lost their hearing before their first birthday. Of the 594 entering students, 507 (85 percent) were white, 48 (8 percent) were minorities, and the ethnic origin of 7 percent was unknown. Forty-six percent of the entering students previously attended public high schools with hearing students, 31 percent attended schools for the deaf, and 23 percent transferred from other postsecondary institutions. More than half the class came from the northeast.

TYPES AND COSTS OF SERVICES

The NTID guidelines state that deaf students should be provided:

- guidance, evaluation, and counseling services;
- physical and mental health services; and
- audiological and "speech conservation" services.

In response to the guidelines, one NTID goal is to provide special support services which facilitate and encourage deaf students to achieve a high degree of personal, social, and cultural development. To determine how this NTID goal is implemented, we reviewed those support services NTID provides to assist deaf students in their studies and transition to college. In fiscal year 1983, these support services included

- notetaking, tutoring, and other support for NTID students enrolled in RIT classes and degree programs;
- interpreting;
- academic, career, and personal counseling;
- career development and placement services;
- communication assessments and advising services;
- student life activities; and
- psychological services.

As the following table indicates, these services were budgeted for \$5.5 million in fiscal year 1983, representing 18.8 percent of NTID's total fiscal year 1983 budget of \$29.6 million.

Table 19

Budgeted Costs of NTID Support Services
(Fiscal Year 1983)

<u>Type of service</u>	<u>Amount budgeted</u>	<u>Percent of total budget</u>	<u>Number of full-time professional staff</u>
Support teams	\$2,689,300	9.1	35
Interpreting services	897,200	3.0	7 ^a
Counseling services	653,900	2.2	19
National Center for Employment of the Deaf	529,700	1.8	11
Assessment and advising	433,800	1.5	12
Student life	193,500	.7	5
Psychological services	<u>146,900</u>	<u>.5</u>	<u>4</u>
Total	<u>\$5,544,300</u>	<u>18.8</u>	<u>93</u>

^aThe interpreting department also includes 44 part-time professionals who provide most of the interpreting services needed by NTID students.

Support teams

The NTID support team budget of \$2.7 million (9 percent of the total NTID budget) supported 35 full-time professional staff in five teams. The staff provide educational support services to NTID students enrolled in RIT classes and programs. Support team staff teach classes, tutor students, provide personal and career counseling, and assist non-NTID faculty in working with deaf students. Each of the five support teams coordinates interpreting, tutoring, and notetaking services for NTID students enrolled in RIT classes with hearing students in general studies, visual communication, social work, business and computer science, and science and engineering courses.

In fiscal year 1983, on the average, each support team served about 250 students per quarter and provided the following services:

<u>RIT courses</u>	<u>Notetaking (hours)</u>	<u>Tutoring (hours)</u>
General studies:		
Liberal arts	4,708	1,750
Physical education	90	75
Visual communication:		
Graphics arts and photography	4,060	1,955
Fine and applied arts	1,564	1,906
Social work:		
Human services	1,596	374
Business and computer science	9,700	1,068
Science and engineering	9,745	3,623

Interpreting services

The fiscal year 1983 budget of \$900,000 for interpreting services (3 percent of the total NTID budget) supported 7 full-time interpreters and 44 part-time interpreters. Interpreting services are provided for NTID students registered in RIT classes that are taught by instructors who do not use sign language. (According to one NTID official, few RIT instructors are able to effectively use sign language.) Interpreters are also available for administrative functions and extracurricular activities, such as theatre presentations, and NTID and RIT student field trips.

In fiscal year 1983, NTID staff provided the following hours of interpreting services:

<u>Type of interpreting service</u>	<u>Number of hours</u>	<u>Percent of total hours</u>
In-class	7,349	80.6
Extracurricular	7,396	16.0
Administrative	1,579	3.4
Total hours	<u>16,324</u>	<u>100.0</u>

Counseling services

The NTID career and personal counseling services fiscal year 1983 budget of \$653,900 supported 19 full-time professional staff in NTID's three technical schools. The staff provide academic advising, and personal and career counseling to all deaf students. The faculty members work with students in both one-on-one and group settings and teach credit-bearing career development courses. Finally, counselors train faculty to facilitate students' career development. During fiscal year 1983 counselors spent their time in the following fashion:

<u>Counseling functions</u>	<u>Estimated percent of time spent</u>
Academic/career development counseling	52
Personal/social counseling	27
Instruction	20
Testing	<u>1</u>
Total	<u>100</u>

National Center for Employment of the Deaf

The fiscal year 1983 budget of \$500,000 for the National Center for Employment of the Deaf supported 11 full-time professional staff. The Center assists NTID students in career development and placement. Working with students from their time of entry, the Center staff seek to develop students' employment skills by helping them obtain required cooperative (co-op) work experience while in school and permanent job placement upon graduation. In addition, Center staff teach a required job search course which emphasizes interviewing, resume writing, and other practical job hunting skills. Center staff also work with employers to determine their staffing needs and provide information on employing the deaf.

During fiscal year 1983, the Center provided the following services:

- Visited 74 of 220 co-op students and their supervisors on the job.
- Conducted on-campus development and recruiting with 11 employers, resulting in 189 interviews for 134 students, and yielding 47 offers and 38 acceptances.
- Conducted 32 visits to potential employers, such as Eastman Kodak, AT&T, IBM, Emerson Electric, Sears, Chevrolet, PIP Printing, and several hospitals.
- Conducted 40 orientation presentations for 500 employers in the Los Angeles and San Francisco areas.

Assessment and advising

The fiscal year 1983 budget of \$400,000 for the Assessment and Advising Department supported 12 full-time professional staff. The department's primary responsibility is to evaluate the communication skills of entering NTID students and place each student in one of four NTID Communications Instruction

Departments.² Students are tested every quarter to determine their progress in the program.

Within the Assessment and Advising Department, NTID also operated a hearing aid shop, which provided technical assistance and audiological devices for students requiring technical aids to maximize their ability to communicate. During fiscal year 1983, the Assessment and Advising Department allocated approximately \$70,600 to the hearing aid shop, which was staffed by one full-time and one part-time staff member and several part-time student assistants. Services provided by the hearing aid shop include dispensing hearing aids; making earmolds; and selling communication aids, such as special alarm clocks. The hearing aid shop served a total of 3,605 customers in 1983.

Student life

The fiscal year 1983 budget of \$194,000 for the Student Life Department supported five full-time professional staff. Part of NTID's general education program, the Department provides activities to enrich the personal and social development of hearing and deaf students at NTID and RIT. During fiscal year 1983, in 3,844 instances, students participated in 28 Department programs, ranging from health programs, such as stop smoking clinics and aerobic demonstrations, to consumer programs on such subjects as apartment living.

The Student Life Department also sponsors an outdoor experiential education program for NTID and RIT students designed to expose hearing and deaf students to outside activities, such as backpacking, canoeing, camping, and rock climbing. According to an NTID official, the program encourages hearing and deaf students to work with and depend on each other in an informal setting. Another NTID official stated that, although the student life programs are open to hearing students, the programs are for the benefit of deaf students, and the NTID Student Life Department pays for the programs. During fiscal year 1983, in 1,374 instances, students participated in 39 outdoor programs. Students pay fees for participation in some programs.

²As of September 1, 1984, the Assessment and Advising Department was discontinued. NTID planned for the professional staff to join the Communications Instruction Departments, from which all assessment and advising will now be done.

Psychological services

The fiscal year 1983 budget of \$147,000 for the Psychological Services Department supported two full-time psychologists and two full-time counselors. NTID provides students with mental health services and preventive mental health services, including individual and group counseling, psychological assessment, psychotherapy, and outreach programs on life adjustment and mental health issues. Programs are also provided for faculty and staff concerning adjustment issues for hearing impaired individuals.

During fiscal year 1983, NTID students received the following services from the Psychological Services Department:

- 160 students received individual counseling.
- 138 students participated in student workshops and group discussions.
- 75 students participated in class presentations.
- 14 students received psychological assessments.

In addition, parents, faculty, and staff were served through the following activities:

- 13 parent conferences;
- 27 team meetings (members of academic departments, advisors, and teachers meet to work with or discuss a student who has been referred to the department);
- 6 case consultations;
- 230 faculty and staff consultations regarding student problems; and
- 4 residence advisor training sessions.

Services provided to NTID students attending RIT classes

As described above, special support services, including tutoring, notetaking, and interpreting, are provided by the Interpreting Department and the Support Team Departments to NTID students (1) who transfer into degree programs in other RIT colleges and (2) who enroll in individual courses offered by other RIT colleges. In fiscal year 1983, these NTID students received 80.6 percent of the interpreting hours provided by the Interpreting Department.

GRADUATION AND EMPLOYMENT

NTID students can earn certificates, diplomas, and an associate's degree in applied science from NTID by completing required courses in business, science and allied health, engineering, and visual communications. As previously discussed, NTID students may also earn associate's, bachelor's, and master's degrees by transferring into RIT degree programs and completing the required coursework.

Degree requirements

Certificate requirements include 45 to 60 credit hours of planned instruction, including 9 credit hours of general education courses and 20 credit hours of communication courses. The instruction allows students to acquire a minimum level of technical skill before entering the work force. All certificate programs require 1 to 2 years to complete.

Diploma requirements include 90 to 135 credit hours of planned instruction, including 9 credit hours of general education courses and 20 credit hours of communication courses. The instruction provides students with a maximal level of technical competency for entry-level positions and minimal attainment in the field of general education. All diploma programs require 2 to 3 years to complete.

Requirements for an associate's degree in applied science include 115 to 180 credit hours of planned instruction, including 20 credit hours of general studies courses taken in RIT's College of Liberal Arts, 9 credit hours of general education courses, and 20 credit hours of communication courses. The instruction permits students to enter careers directly or to transfer to bachelor degree programs. All associate's degree programs require 3 to 4 years to complete.

RIT bachelor degree requirements include no less than 180 credit hours of planned instruction, including successfully completing all required courses, cooperative employment, and departmental writing standards, and maintaining a 2.0 cumulative grade point average. Most bachelor degree programs require 4 to 5 years to complete.

All NTID programs require students to complete at least one 8-week cooperative (co-op) work experience as determined by the respective academic departments. Students are assisted by the staff of the National Center for Employment of the Deaf in acquiring these co-op experiences. As previously discussed, NTID co-op program goals are to provide students with practical work experience in their chosen career field, to encourage

students to develop communication and interpersonal relations skills, to provide NTID faculty and staff the opportunity to research occupational and employment related aspects of deafness, and to disseminate information nationally regarding NTID.

Examples of NTID programs offering certificates, diplomas, and associates' degrees are listed below.

<u>Degree</u>	<u>Program</u>
Certificate	Business Histologic assistant Physicians office assistant
Diploma	Architectural drafting Clinical chemistry assistant Manufacturing processes
Associate's degree in applied science	Architectural technology Electromechanical technology Medical laboratory technician

Examples of RIT programs into which NTID students may transfer and earn associate's, bachelor's, or master's degrees include

- computer science;
- accounting;
- business administration;
- ceramics and ceramic sculpture;
- fine arts;
- electrical, mechanical, and industrial engineering;
- graphic design;
- industrial and interior design;
- woodworking and furniture design;
- photographic science and instrumentation;
- social work; and
- chemistry.

Length of stay

To obtain information on how long NTID students take to complete their studies, we looked at the length of stay of NTID's 130 spring 1984 graduates. In spring 1984, 19 students received bachelor's degrees, 56 received associate's degrees, 49 received diplomas, and 6 received certificates. As illustrated in the following tables:

- Of the 19 students receiving bachelor degrees, 16 (84 percent) completed their studies in 5 to 9 years, with 42 percent completing in 5 to 6.9 years and another 42 percent completing in 7 to 9 years; 3 (16 percent) finished in 2 to 4.9 years.
- Of the 56 students receiving associate's degrees, 51 (91 percent) completed their studies in 3 to 5.9 years, with 29 (52 percent) completing their studies in 3 to 3.9 years; 5 (9 percent) completed their studies in 6 to 15 years.
- Of the 49 students receiving diplomas, 45 (92 percent) completed their studies in 3 to 6 years, with 30 (61 percent) finishing in 3 to 3.9 years; 4 (8 percent) finished in 1 to 2.9 years.

Table 2)

Length of Stay for Spring 1984 NTID Graduates
Who Received Bachelor Degrees

<u>Number of</u> <u>years</u>	<u>Number of</u> <u>graduates</u>	<u>Percent of</u> <u>graduates</u>
2-4.9	3	16
5-6.9	8	42
7-9	<u>8</u>	<u>42</u>
Total	<u>19</u>	<u>100</u>

Table 21

Length of Stay for Spring 1984 NTID Graduates
Who Received Associate's Degrees

<u>Number of</u> <u>years</u>	<u>Number of</u> <u>graduates</u>	<u>Percent of</u> <u>graduates</u>
3-3.9	29	52
4-5.9	22	39
6-15	<u>5</u>	<u>9</u>
Total	<u>56</u>	<u>100</u>

Table 22

Length of Stay for Spring 1984 NTID Graduates
Who Received Diplomas

<u>Number of</u> <u>years</u>	<u>Number of</u> <u>graduates</u>	<u>Percent of</u> <u>graduates</u>
1-2.9	4	8
3-3.9	30	61
4-6	<u>15</u>	<u>31</u>
Total	<u>49</u>	<u>100</u>

In addition, of the 6 students receiving certificates, 1 student completed the program in 1 year, 3 in 2 years, and 2 in 4 years.

Characteristics of graduates

Since the first graduating class in 1970 through the 1984 graduating class, there were 1,866 NTID graduates, with 1,468 (79 percent) earning degrees from NTID and 398 (21 percent) earning degrees from other RIT colleges.

From 1970 through 1983 there were 1,667 NTID graduates, with 1,314 (79 percent) earning degrees from NTID and 353 (21 percent) earning degrees from other RIT colleges. Graduates of NTID programs majored in the following programs:

<u>NTID program</u>	<u>Number of graduates</u>	<u>Percent of graduates</u>
Business	518	39.4
Visual Communication	317	24.1
Engineering Technologies	286	21.8
Applied Science/Allied Health	<u>193</u>	<u>14.7</u>
Total	<u>1,314</u>	<u>100.0</u>

NTID students graduated from the following RIT colleges:

<u>RIT college</u>	<u>Number of graduates</u>	<u>Percent of graduates</u>
Business	80	22.7
Applied Science/Technology	74	21.0
Liberal Arts	63	17.8
Fine/Applied Arts	53	15.0
Science	35	9.9
Graphic Arts/Photography	29	8.2
Engineering	<u>19</u>	<u>5.4</u>
Total	<u>353</u>	<u>100.0</u>

Of 989 NTID students in the 1982-83 academic year, 180 (18 percent) obtained degrees, with 137 (76 percent) graduating from NTID and 43 (24 percent) graduating from RIT. Overall, 26 graduates (15 percent) earned bachelors' degrees, 76 (42 percent) earned associates' degrees, 60 (33 percent) earned diplomas, and 18 (10 percent) earned certificates.

Attrition rates

NTID's attrition rate for all students in school year 1982-83 was about 38 percent. Of 989 NTID students enrolled in NTID or other RIT colleges in the 1982-83 school year, 377 were dismissed or withdrew, with 321 (85 percent) leaving NTID programs and 56 (15 percent) leaving other RIT programs. Overall, voluntary attrition accounted for 222 student withdrawals (59 percent) and involuntary attrition (academic and disciplinary dismissals) accounted for 88 student withdrawals (23 percent). NTID could not identify the reason for 67 student withdrawals (18 percent). These 1982-83 attrition rates were similar to NTID's 1981-82 rates.

We also looked at the student withdrawal rates for each NTID program. In the 1982-83 school year, NTID degree programs in which 10 or more students withdrew, resulting in a 25-percent or greater attrition rate, included the following:

<u>Degree program</u>	<u>Number of students who withdrew</u>	<u>Percent of students who withdrew</u>
Office Practice Procedures	30	37.5
Data Processing	28	25.2
Electro Mechanical Technology	25	45.5
Applied Accounting	21	28.4
Engineering Technology	17	54.8
Medical Laboratory Technology	16	36.4
Applied Photography	16	47.1
Printing Production Technology	16	50.0
Manufacturing Technology	12	48.0
Architectural Technology	11	64.7
Business Administration	10	28.6

Placement of graduates

NTID students receive assistance in career development and job placement (co-op and permanent) from NTID's National Center for Employment of the Deaf. While many NTID students seek and obtain employment when they graduate, others continue their education at RIT or other institutions.

The following table describes the employment and educational status of NTID students who graduated during the 1981-82 and 1982-83 school years:

<u>Employment/education status</u>	<u>1981-82</u>		<u>1982-83</u>	
	<u>Graduates</u>	<u>Percent</u>	<u>Graduates</u>	<u>Percent</u>
Employed	138	68.3	91	50.6
Unemployed	17	8.4	19	10.6
Continued education/ RIT	34	16.8	56	31.1
Continued education/ other college	6	3.0	4	2.2
Did not seek employment	3	1.5	6	3.3
Unavailable	4	2.0	4	2.2
Total	<u>202</u>	<u>100.0</u>	<u>180</u>	<u>100.0</u>

Of the 91 NTID students who obtained employment in the 1982-83 academic year, 65 (71 percent) acquired jobs in business and industry; 22 (24 percent) acquired jobs with federal, state, or local governments; 3 acquired jobs in education; and the type of employment obtained by 1 graduate was unavailable. From another perspective, 85 (93 percent) obtained employment in fields related to their degrees, and 3 (3 percent) were employed by schools for the deaf. NTID's 1981-82 graduates obtained similar job placements.

Employment rates of NTID students graduating from NTID programs and those graduating from RIT programs are similar. In 1982-83 jobs were obtained by 50 percent of the students who graduated from NTID programs and 54 percent of the students who graduated from RIT programs.

NTID graduates work for a wide variety of employers. For example, the 1982-83 graduates obtained employment with the U.S. Army, Citibank, AT&T, IBM, Exxon Corporation, Grumman Aerospace, Erie County government, Hewlett Packard, Fleck Machine Company, Pearle Vision Center, Strong Memorial Hospital, and NTID.

Cooperative work experience

We reviewed 15 of 220 student cooperative education files for the 1982-83 academic year to identify some of the work experiences students received from the program. Our review indicated that during their co-op experience, the students obtained employment, such as data entry operators, electronic technicians, optical benchmen, office clerks, and tool and dye makers. Students worked full-time (40-hour weeks) and earned salaries ranging from \$135/week to \$390/week.

NTID COST PER STUDENT COMPARED WITH COST PER STUDENT AT OTHER INSTITUTIONS

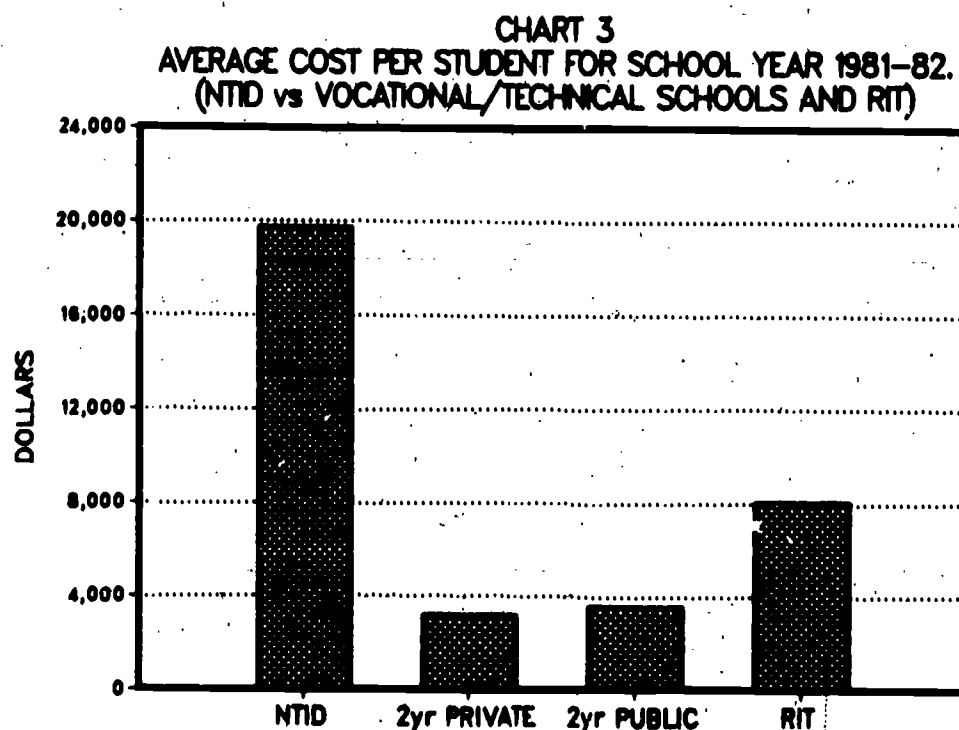
Based on the most recent data available from ED, NTID's total educational and general expenditures per student for the 1981-82 school year were \$19,771 compared with the costs of \$3,572 for public 2-year vocational-technical institutions, \$3,207 for private 2-year vocational-technical institutions, and \$8,085 at RIT. Thus, NTID's 1981-82 educational and general expenditures per student were

--6.2 times higher than the average total cost per student for private 2-year vocational-technical institutions,

--5.5 times higher than the average total cost per student for public 2-year vocational-technical institutions, and

--2.4 times higher than RIT's total cost per student.

These comparisons and the details to follow are provided for informational purposes only. Because of the lack of baseline information on the costs of deaf education, we cannot judge the reasonableness of NTID's costs. The results of our comparison are shown in the following chart.



THE AVERAGE COST PER STUDENT AT NTID WAS SIGNIFICANTLY HIGHER THAN THOSE AT SCHOOLS SERVING "HEARING" STUDENTS.

In addition, NTID's 1981-82 cost per student in each of seven of the nine expenditure categories which comprise total educational and general expenditures was consistently higher than the average costs per student for institutions in the comparison groups. We did not compare the cost per student for two of the expenditure categories--scholarships and fellowships, and mandatory transfers--because they comprise less than 1 percent of NTID's total expenditures. The seven expenditure categories for which NTID costs were higher and the associated costs are:

<u>Expenditure categories</u>	<u>NTID's 1981-82 cost per student</u>
Instruction	\$5,995
Academic support	4,809
Student services	3,018
Institutional support	2,576
Plant operation and maintenance	1,518
Research	896
Public service	784

As was the case with similar data presented earlier in this report, the expenditure categories are defined by ED (see app. II) and used by all higher education institutions which annually report financial data to ED in its HEGIS. The results of our comparisons for each expenditure category and the types of costs NTID charged to each are explained below.

Instruction

NTID's 1981-82 cost per student for instruction (\$5,995) was about

--3 times higher than the average cost for public 2-year vocational-technical institutions (\$1,848),

--5 times higher than the average cost for 2-year private vocational-technical institutions (\$1,172), and

--1.4 times higher than RIT's cost per student for instruction (\$4,308).

NTID instruction costs included faculty salaries and fringe benefits, equipment purchases, and costs associated with NTID students attending classes at other RIT colleges. (See pp. 105 to 107 for a discussion of NTID's faculty salaries and student-faculty ratio--two factors which contribute to cost per student for instruction.)

Academic support

NTID's cost per student for academic support (\$4,809) was about

- 16 times higher than the average cost for public 2-year vocational-technical institutions (\$302),
- 16 times higher than the average cost for private 2-year vocational-technical institutions (\$295), and
- 12 times higher than RIT's cost per student for academic support (\$402).

NTID's expenditures for academic support included, for example, costs for interpreting and student notetaking services, faculty development, instructional media production and television, and the Office of the Academic Dean.

Student services

NTID's cost per student for student services (\$3,018) was about

- 12 times higher than the average cost for public 2-year vocational-technical institutions (\$261),
- 10 times higher than the average cost for private 2-year vocational-technical institutions (\$312), and
- 4 times higher than RIT's cost per student for student services (\$765).

NTID's costs for student services included, for example, expenditures for psychological services, assessment and advising, counseling services, admissions, student health, and athletics.

Institutional support

NTID's cost per student for institutional support (\$2,576) was about

- five times higher than the average cost for public 2-year vocational-technical institutions (\$549),
- three times higher than the average cost for private 2-year vocational-technical institutions (\$781), and
- three times higher than RIT's cost per student for institutional support (\$863).

NTID's costs for institutional support included, for example, expenditures for the director's office, business management, accounting and finance, personnel administration, and institutional overhead.

Operation and maintenance of plant

NTID's cost per student for plant operation and maintenance (\$1,518) was about

- four times higher than the average cost for public 2-year vocational-technical institutions (\$413),
- four times higher than the average cost for private 2-year vocational-technical institutions (\$429), and
- three times higher than RIT's cost per student for plant operations and maintenance (\$545).

Examples of NTID's plant operation and maintenance costs included costs for custodial, maintenance, and security patrol services and utilities. In addition, in school year 1981-82, these costs included over \$500,000 for nonrecurring renovations to accommodate additional students.

Research

NTID's cost per student for research (\$896) was about

- 150 times higher than the average cost for public 2-year vocational-technical institutions (\$6),
- 224 times higher than the average cost for private 2-year vocational-technical institutions (\$4), and
- 6 times higher than the cost per student for research at RIT (\$153).

NTID's research expenditures included, for example, costs for applied research related to communication assessment and training, education and learning, and target population characteristics.

Public service

NTID's cost per student for public service (\$784) was about

- 14 times higher than the average cost for public 2-year vocational-technical institutions (\$55),

--87 times higher than the average cost for private 2-year vocational-technical institutions (\$9), and

--5 times higher than RIT's cost per student for public service (\$161).

Examples of NTID's public service costs included expenditures for its Public Information Office, associate's degree program in interpreting, and graduate Educational Specialist Program, which is operated jointly with the University of Rochester. The Educational Specialist Program prepares students to work as professionals with deaf people in secondary education.

COST PER STUDENT DIFFERENCE BETWEEN EDUCATING HEARING AND DEAF STUDENTS

According to NTID officials, NTID's cost per student is higher than similar schools for "hearing" students because of additional costs associated with educating deaf students. These additional costs include, for example:

- Academic support costs for instructional technology to address the special learning needs of deaf students and faculty and staff training in deaf education (about 80 percent of NTID's faculty and staff have no background in deaf education).
- Student services costs for academic, personal, and career counseling needed by deaf students who lag 3 to 4 years behind their "hearing" peers in personal, social, and career decision-making skills; and basic skills instruction in math, science, and English.
- Operations and maintenance and institutional support costs to support a lower student-faculty ratio (see discussion below).

In addition, NTID officials stated that, in their opinion, unlike other 2-year vocational-technical institutions in the comparison group, NTID has mandated research and public service functions (see p. 75), which result in additional costs.

STUDENT-FACULTY RATIO COMPARED WITH THE STUDENT-FACULTY RATIO AT OTHER INSTITUTIONS

NTID's student-faculty ratio (the ratio of full-time equivalent students to full-time instructional faculty) in school years 1981-82 and 1982-83 was 8:1 and 9:1, respectively. We compared NTID's student-faculty ratio with the student-faculty ratio at other institutions because it is a major factor contributing to an institution's cost per student (see p. 100).

The student-faculty ratio does not necessarily infer class size. In this regard, we compared NTID's student-faculty ratio with public and private 2-year institutions. Based upon available information obtained from ED, we estimated that in school years 1981-82 and 1982-83, NTID's student-faculty ratio was three to four times lower than the average student-faculty ratio at both 2-year public and private postsecondary institutions for "hearing" students. In addition, based upon the most recent available information from RIT, we determined that in school year 1982-83, NTID's student-faculty ratio was 2.3 times lower than RIT's student-faculty ratio.

In 1981-82, NTID's student-faculty ratio was 8:1 compared to 30:1 and 31:1, respectively, at 2-year public and private institutions. In 1982-83 NTID's student-faculty ratio was 9:1 compared to 30:1 and 32:1, respectively, at the public and private 2-year institutions, and 21:1 at RIT.

According to NTID officials, NTID's student-faculty ratio is lower than the ratio at other institutions because (1) deaf students require more individualized instruction during and after class than "hearing" students and (2) technical education classes, such as "labs" and drafting classes, require smaller classes. For example, if a typing instructor observes common errors made by deaf students during class time, he or she must address each student individually. This is time consuming, and therefore, class size must be limited to a manageable number. To ensure the required individualized instruction, NTID classrooms are equipped with desks or work stations to accommodate no more than 10 to 15 students.

FACULTY COMPENSATION COMPARED WITH FACULTY COMPENSATION AT OTHER INSTITUTIONS

NTID's 1983-84 average faculty salaries by academic rank, fringe benefits as a percentage of salaries, and average compensation (salary and fringe benefits) for "all ranks combined" are listed in table 23 on page 107. (Data were not available on compensation by academic rank.) We compared NTID's faculty compensation with the median compensation for several other institutions because such expenditures have a significant impact on instruction costs. (See p. 102.)

We found that, while NTID average salary for each rank was higher than the median salaries for seven 2-year vocational-technical institutions in New York³ and five New York community colleges selected by NTID as "similar" institutions,⁴ NTID's average compensation for "all ranks combined" was less than the median compensation for the comparison schools. In addition, in comparing NTID's average compensation with the average compensation of its sponsoring institution, KIT, we found that NTID's was lower by \$2,700.

Two factors which may contribute to NTID's lower average compensation are: (1) its comparatively lower average fringe benefits and (2) its fewer number of faculty at the higher academic ranks compared with the number at the lower ranks (44 professors and associate professors compared with 127 assistant professors and instructors).

Table 23

Comparison of NTID 1983-84 Average Faculty Compensation with Compensation at Other Institutions

<u>Institution</u>	<u>Median salary</u>				<u>Fringe benefits as per-cent of salary</u>	<u>Average compensation (salary and benefits) for "all ranks combined"</u>
	<u>Pro-fessor</u>	<u>Associate Professor</u>	<u>Assistant Professor</u>	<u>In-structor</u>		
NTID	\$39,500	\$33,100	\$25,800	\$21,100	18.5	\$30,900
New York public 2-year vocational-technical institutions	31,100	26,600	22,400	18,800	26	32,400
NTID's self-selected peer group	35,600	30,000	24,400	20,100	26	37,000

³For comparison purposes, we used 2-year vocational-technical schools located in New York, rather than nationwide, to minimize salary differences that may be caused by geography.

⁴These include Monroe, Erie, Suffolk, Nassau, and Onondaga community colleges.

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United States Senate

COMMITTEE ON LABOR AND
 HUMAN RESOURCES
 WASHINGTON, D.C. 20510

April 19, 1984

Charles A. Bowsher
 Comptroller General of the
 United States
 U.S. General Accounting Office
 441 'G' Street, NW
 Washington, D.C. 20548

Dear Mr. Bowsher:

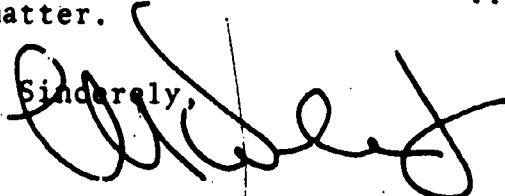
In fiscal year 1984 Gallaudet College in Washington, D.C. and the National Technical Institute for the Deaf (NTID) in Rochester, New York received annual federal appropriations of \$54 million and \$28 million, respectively. Gallaudet College is a private nonprofit liberal arts college for the deaf. In addition to the college, Gallaudet operates the Kendall Demonstration Elementary School and the Model Secondary School. NTID is a private nonprofit institution which provides postsecondary technical education to deaf students. Neither Gallaudet nor NTID has ever been reviewed by GAO.

In preparation for an oversight hearing in early 1985, I believe it is necessary for the Subcommittee on the Handicapped to have a clearer understanding of how the institutions use their federal funds. Previous discussions between our staffs indicated that the General Accounting Office would be able to provide us with descriptive information on the institutions' operations in time for the hearing. It would be helpful to the Subcommittee if GAO could answer such questions as: What are the characteristics and qualifications of the students who are served by each institution? What types of services are provided? What are the students' graduation and placement rates? How do the costs of education (such as salaries and expenses) of these two special institutions compare, when appropriate, with (a) other similar programs serving deaf persons, and (b) institutions serving integrated student populations?

In addition, the Subcommittee would like GAO to explore the relationship between NTID and its sponsoring institution, the Rochester Institute of Technology (RIT), especially pertaining to the number of NTID students who apply to and are admitted into RIT.

I would like to have the report by January 1, 1985. I appreciate your attention to this matter.

Sincerely,


Lowell Weicker, Jr., Chairman
Subcommittee on the Handicapped

LW/nbd

EXPENDITURE CATEGORIES

Following are ED's definitions of the nine categories comprising total general and educational expenditures. Institutions of higher education report such expenditures to ED in its annual Higher Education General Information Survey.

Instruction includes expenditures related to credit and non-credit instruction, such as general academic instruction, community education, and remedial and tutorial instruction,

Research includes expenditures for research activities sponsored by an external agency or separately budgeted by a unit within the institution,

Public service includes expenditures for noninstructional services and activities beneficial to external groups, such as seminars and projects for particular sectors of the community and cooperative extension services,

Academic support includes expenditures for support services which are an integral part of the institution's primary mission of instruction, research, or public service,

Student services includes expenditures for activities whose primary purpose is to contribute to students' emotional and physical well-being, and intellectual, cultural, and social development,

Institutional support includes expenditures for day-to-day operations of the institution, such as general administrative services and legal and fiscal operations, and excludes expenditures for physical plant operations,

Plant operations and maintenance includes expenditures for services and maintenance related to campus grounds and facilities used for educational and general purposes,

Scholarships and fellowships includes expenditures for grants and trainee stipends for individuals enrolled in formal coursework, and

Mandatory transfers from current funds are those that must be made to fulfill a binding legal obligation.

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